The SANUKEHL®-Preparations

Polysaccharides for Haptenic Therapy

Semmelweis-Institut

Publisher for Naturopathy

Published by Semmelweis-Institut
Verlag für Naturheilkunde
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3rd edition in the English language 2016

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Disclaimer:

The purpose of this book is to provide information about the use of the SANUM preparations for a wide range of medical problems only. However, illness can be highly unpredictable, and therefore, one should seek the best possible medical expertise. No liability is accepted by the author and/or the publishers for any claims arising from the administration, prescribing strategy or use of any of the remedies described.

To the Reader:

This book on Sanum medicinal products has been compiled from research conducted by leading homeopathic practitioners in and outside of Germany. The collected research and uses discussed here have been reviewed by a distinguished panel. This valuable compilation of known medicinal uses of the SANUKEHL® remedies is made available to interested practitioners and researchers in many countries.

The production process of the homeopathics covered by this book is strictly based on the German Homeopathic Pharmacopoeia (Homöopathisches Arzneimittelbuch), which essentially has been adopted by many other countries. However, because not all products, dosage forms or intended uses are available or approved by the relevant authorities in all national markets, practitioners are advised to seek local guidance regarding the legal status of the products and intended uses in their areas. For example, the oral portable SIPS (1 and 2 ml vials) are at this time available only in the United States of America.

Our thanks to all those who have made publication of this book possible and to the peer reviewers and practitioners who have contributed their time and effort to disseminate this information.

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Polysaccharides for Haptenic Therapy

Introduction

It is well known that various microbes, bacteria and fungi, produce toxins. These toxins, considered antigens, are generally proteins and lipo-polysaccharides (endotoxins), including lipid 'A', which is a cell wall component of Gram-negative bacteria. The production of antigens is a naturally occurring process of the microbes to protect themselves and to support the environment, the milieu, in which they live. However, the toxins are frequently irritants to other organisms, for example mammals, i.e. humans and animals. Some of these antigens are actually the causative agent in disease conditions. In fact, it has been shown that the toxin can still be present after the microbe itself has been eliminated, thus perpetuating the disease.

In order to protect themselves from their own toxins, microbes produce polysaccharides, termed antigen absorbers by CORNELIUS[1]. These polysaccharides are capable of binding the microbe's own toxins, rendering them harmless to the microbe. Moreover, viruses, bacteria, plants and animals utilize polysaccharides to communicate and store biological information. This information may serve as a code, which is used to influence a multitude of regulatory processes in the host organism.

Polysaccharides exist as either low, or high molecular weight molecules. The low molecular weight polysaccharides may represent haptens, partial antigens, which are incapable alone of causing the production of antibodies. However, haptens may combine with a high molecular weight carrier, such as a protein, which can stimulate cellular and humoral immune defenses. In some instances, a hapten-carrier complex can trigger the production of antibodies, some of which combine with the hapten portion of the complex.

For example, bacterial toxins released during a previous infection and not eliminated from the body due to immune system deficiencies can be bound by haptens, i.e. partial antigens, and thus represent complete antigens. These antigens are now capable of stimulating the immune system by activating the T-lymphocytes, ultimately leading to elimination of the bacterial toxins.

Cell Wall Deficient Microbes and Haptens

It has been proven through research that under certain milieu conditions, and/or when the immune system is insufficient, bacteria and fungi can multiply as organisms called cell wall deficient (CWD) microbes. These organisms lack the normal cell wall components that enable them to be recognized by the body's immune system. As such, these microbes go largely unnoticed and continue to be associated with disease conditions, which cannot be effectively treated by conventional methods.

The SANUKEHL Preparations

The microbial toxins, along with the cell wall deficient microbes, offer challenges to the body's immune and eliminatory mechanisms. However, the **SANUKEHL** preparations, used individually, or in the scope of a naturopathic regulation therapy, offer a therapeutic mechanism to facilitate the removal of these indiscernible organisms.

[1] Peter Cornelius: Nosoden und Begleittherapie. 4th edition 2005, Pflaum Verlag München, ISBN: 3-7905-0930-2

Production

The production of the **SANUKEHL** preparations involves using the **non-living** forms of certain bacteria and fungi. Using a painstaking extraction process, the polysaccharides necessary for hapten therapy are distilled out of the organisms' cell walls. These bacterial and fungal polysaccharides (haptens) have significant variations of structure, which result in a large number of different antigen components. This variety of antigen components provides for a broad spectrum of excretion therapy. In addition, the SANUKEHL polysaccharide extract is homeopathically potentiated to enhance the therapeutic benefit of the products.

Polysaccharides from microorganisms are non-toxic to the host organism. Therefore, allergic and fever reactions to the SANUKEHL preparations are unlikely.

The following haptens are available as **SANUKEHL** preparations in homeopathic dilutions:

Name	Source
SANUKEHL® ACNE 6X (D6) Drops **SANUKEHL® ACNE 5X (D5) Ampoules**	Propionibacterium acnes
SANUKEHL® BRUCEL 6X (D6) Drops **SANUKEHL® BRUCEL 6X (D6) Ampoules**	Brucella melitensis
SANUKEHL® CAND 6X (D6) Drops **SANUKEHL® CAND 5X (D5) Ampoules**	Candida albicans
SANUKEHL® COLI 6X (D6) Drops **SANUKEHL® COLI 7X (D7) Ampoules**	Escherichia coli
SANUKEHL® KLEBS 6X (D6) Drops **SANUKEHL® KLEBS 6X (D6) Ampoules**	Klebsiella pneumoniae
SANUKEHL® MYC 6X (D6) Drops **SANUKEHL® MYC 5X (D5) Ampoules**	Mycobacterium bovis (BCG)
SANUKEHL® PROT 6X (D6) Drops **SANUKEHL® PROT 7X (D7) Ampoules**	Proteus vulgaris
SANUKEHL® PSEU 6X (D6) Drops **SANUKEHL® PSEU 6X (D6) Ampoules**	Pseudomonas aeruginosa
SANUKEHL® SALM 6X (D6) Drops **SANUKEHL® SALM 6X (D6) Ampoules**	Salmonella enteritidis
SANUKEHL® SERRA 6X (D6) Drops **SANUKEHL® SERRA 7X (D7) Ampoules**	Serratia marcescens
SANUKEHL® STAPH 6X (D6) Drops **SANUKEHL® STAPH 5X (D5) Ampoules**	Staphylococcus aureus
SANUKEHL® STREP 6X (D6) Drops **SANUKEHL® STREP 5X (D5) Ampoules**	Streptococcus pyogenes
SANUKEHL® TRICH 6X (D6) Drops **SANUKEHL® TRICH 5X (D5) Ampoules**	Trichophyton verrucosum

Using SANUKEHL Preparations:

SANUKEHL preparations are not nosodes. Because of their effect in the organism, the **SANUKEHL** preparations are utilized in the following areas:

1. Specific Terrain Cleansing:

Specific terrain cleansing of microorganisms or their metabolic products is possible with the aid of the **SANUKEHL** preparations in conjunction with microbiological, mycological or clinical findings. In addition, the corresponding **SANUKEHL** preparations can be used against infections with similar pathogens.

Administering specific polysaccharides communicates specific information to the host organism, which it needs to regulate its symbiontic equilibrium with the microorganism in question.

2. Modulating the Immune System and Eliminating Reaction Blockages:

After binding to a carrier molecule in the organism, haptens can trigger a humoral as well as a cellular immune response. These mechanisms neutralize and eliminate microbial antigens. Introducing the **SANUKEHL** structures to the body very quickly leads to immune complex formation using the immuno-globulins present. This substance presumably functions as an immune modulator, which effects a correction of immune-regulatory imbalances and develops its effect, for example, via induction of cytokines, particularly GM-CSF and IL-10. Based on investigations into the effects of **SANUKEHL Pseu**, it was possible to derive, in an immunologically substantiated manner, that long lasting reaction blockages (e.g. as a consequence of treatment with corticosteroids) in cancer patients, or in cases of immune-system suppression, can be eliminated with the aid of the modulating effect of the **SANUKEHL** preparations.

3. Hyposensitisation:

Haptens can also bind the antibodies or circulating immune complexes created to counteract the corresponding complete antigen. These antibodies (IgG) exhibit a blocking activity to allergic reactions that is transmitted by another antibody class (IgE). As hyposensitisation continues to develop, the proportion of IgG often increases, while the concentration of IgE in the blood serum falls off.

4. Intermediate Agents when Treating with Nosodes:

This effect is based on the absorption of the pathogenic antigens or toxins. Severe initial deterioration or antigen blockages are alleviated or eliminated by **SANUKEHL** preparations.

5. As a Remedy for Individual Clinical Indication (see also **Isopathic/Homeopathic Materia Medica)**

6. General Instructions for Use
(For detailed information on the single SANUKEHL preparations please see the following pages)

Characteristics:	**SANUKEHL** preparations contain specific extracts of polysaccharide components (haptens) of the respective bacterium or fungus. The effect is based on the absorption of the pathogen's antigens and toxins.
Application:	Treatment of more than 8 weeks depends on the advice of the physician or health care professional.
Side effects:	Because of specific organic components of the **SANUKEHL** preparations, theoretically, hypersensitivity may occur, mainly in the form of skin reactions. Also allergic reactions against the active ingredient are possible. In this case, discontinue medication and treat symptomatically.
Contraindications:	Do not administer in cases of known hypersensitivity to the active ingredient or similar species.
Adverse reactions:	None known.
Interactions with other remedies:	Immunosuppressive drugs can influence the effectivity of the **SANUKEHL** preparation. An interval of 4 weeks before and after treatment with orally administered live vaccines must be observed.

Precautions: As with all medications and due to the variations of clinical studies, professional medical advice should be sought prior to recommending this product to patients with auto-immune diseases, to women during pregnancy or breastfeeding, as well as with children.

Advice: **Drops:** After opening, contents must be used within two months.

Duration of treatment: Dependent on the advice of the physician or health care professional.

How supplied: The following dosage forms are available: 10 ml dropper bottle, 1 ml ampule 10 and 50.

For detailed information on the complete range of SANUM preparations please see the "Isopathic/Homeopathic Materia Medica".

Please note: Due to legal provisions, in some countries the SANUKEHL preparations are available in other potencies than mentioned in this book.

SANUKEHL® Acne 5X (D5) Ampules
SANUKEHL® Acne 6X (D6) Drops

Active ingredient: Ampules: Propionibacterium acnes extractum (lyophil., steril.) 5X (D5). Drops: Propionibacterium acnes extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Propionibacterium acnes extractum (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Propionibacterium acnes extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Acne conglobata; rheumatoid arthritis; venous and cerebral circulatory disorders.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Brucel 6X (D6) Ampules
SANUKEHL® Brucel 6X (D6) Drops

Active ingredient: Ampules: Brucella melitensis extractum (lyophil., steril.) 6X (D6). Drops: Brucella melitensis extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Brucella melitensis extractum (lyophil., steril.) 6X (D6) aquous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Brucella melitensis extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Myalgia, subacute polyarthritis; intermittent fever with influenza symptoms; neurasthenia; orchitis, epididymitis; headaches/migraine; lumbar syndrome.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Cand 5X (D5) Ampules
SANUKEHL® Cand 6X (D6) Drops

Active ingredient: Ampules: Candida albicans extractum Sero A et B (lyophil., steril.) 5X (D5). Drops: Candida albicans extractum Sero A et B (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Candida albicans extractum Sero A et B (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Candida albicans extractum Sero A et B (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Diseases of the mouth, like stomatitis, gingivitis, perlèche, aphthae; intestinal dysbiosis, candida infections, colitis, obstipation after treatment with antibiotics; allergic asthma; vulvitis, vulvovaginitis, kraurosis vulvae; dermatosis, e.g. after treatment with antibiotics.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Coli 7X (D7) Ampules
SANUKEHL® Coli 6X (D6) Drops

Active ingredient: Ampules: Escherichia coli extractum (lyophil., steril.) 7X (D7). Drops: Escherichia coli extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Escherichia coli extractum (lyophil., steril.) 7X (D7) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Escherichia coli extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Cholangitis, cholecystitis, gastroenteritis, colitis; pyelonephritis, cystitis; epididymitis, prostatitis; salpingitis, metritis, vaginitis; bronchitis.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Klebs 6X (D6) Ampules
SANUKEHL® Klebs 6X (D6) Drops

Active ingredient: Ampules: Klebsiella pneumoniae extractum (lyophil., steril.) 6X (D6). Drops: Klebsiella pneumoniae extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Klebsiella pneumoniae extractum (lyophil., steril.) 6X (D6) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Klebsiella pneumoniae extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Respiratory diseases; dysbiosis after antibiotic therapy.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Myc 5X (D5) Ampules
SANUKEHL® Myc 6X (D6) Drops

Active ingredient: Ampules: Mycobacterium bovis (BCG) extractum (lyophil., steril.) 5X (D5). Drops: Mycobacterium bovis (BCG) extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Mycobacterium bovis (BCG) extractum (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Mycobacterium bovis (BCG) extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Respiratory diseases, such as bronchial asthma, pleurisy, rhinitis; chronic recurrent diseases of the skin and the mucous membranes, such as juvenile acne, urticaria, hordeolum, psoriasis; lupus erythematosus; arthritis; osteochondrosis; cholecystitis; enterocolitis; ventricular and duodenal ulcer; headache; metritis; nephritis; otitis.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Prot 7X (D7) Ampules
SANUKEHL® Prot 6X (D6) Drops

Active ingredient: Ampules: Proteus vulgaris extractum (lyophil., steril.) 7X (D7). Drops: Proteus vulgaris extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Proteus vulgaris extractum (lyophil., steril.) 7X (D7) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Proteus vulgaris extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Otitis; osteomyelitis; intestinal dysbiosis after treatment with antibiotics; ulcerative colitis; angina; rheumatic disorders; chronic suppurative affections of the respiratory and intestinal tract.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Pseu 6X (D6) Ampules
SANUKEHL® Pseu 6X (D6) Drops

Active ingredient: Ampules: Pseudomonas aeruginosa extractum (lyophil., steril.) 6X (D6). Drops: Pseudomonas aeruginosa extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Pseudomonas aeruginosa extractum (lyophil., steril.) 6X (D6) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Pseudomonas aeruginosa extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Respiratory disorders, such as bronchial asthma; otitis; sinusitis; pharyngitis, hay fever, chronic bronchitis; infectious and allergic dermatitis, pruritus, collagenosis, fibromyalgia, ulcer cruris, keloids, burns, autoimmune diseases, treatment of complaints caused by immunosuppressive treatment.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Salm 6X (D6) Ampules
SANUKEHL® Salm 6X (D6) Drops

Active ingredient: Ampules: Salmonella enteritidis extractum (lyophil., steril.) 6X (D6). Drops: Salmonella enteritidis extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Salmonella enteritidis extractum (lyophil., steril.) 6X (D6) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Salmonella enteritidis extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Impaired development; chronic pancreatitis, chronic gastroenteritis; celiac disease; rheumatic fever.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Serra 7X (D7) Ampules
SANUKEHL® Serra 6X (D6) Drops

Active ingredient: Ampules: Serratia marcescens extractum (lyophil., steril.) 7X (D7). Drops: Serratia marcescens extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Serratia marcescens extractum (lyophil., steril.) 7X (D7) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Serratia marcescens extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Nosocomial infections with Serratia marcescens.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Staph 5X (D5) Ampules
SANUKEHL® Staph 6X (D6) Drops

Active ingredient: Ampules: Staphylococcus aureus extractum (lyophil., steril.) 5X (D5). Drops: Staphylococcus aureus extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Staphylococcus aureus extractum (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Staphylococcus aureus extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Folliculosis, furunculosis, impetigo, acne conglobata; blepharitis, hordeolum, chalazion, angina, otitis, mastoiditis, sinusitis; meningitis; osteomyelitis; nephritis, urogenital infections with staphylococci.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Strep 5X (D5) Ampules
SANUKEHL® Strep 6X (D6) Drops

Active ingredient: Ampules: Streptococcus pyogenes extractum (lyophil., steril.) 5X (D5). Drops: Streptococcus pyogenes extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Streptococcus pyogenes extractum (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Streptococcus pyogenes extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Angina tonsillaris; eczema; endo-, myo- and pericarditis; empyema; mastitis puerperalis; osteomyelitis; otitis media; sinubronchitis; phlegmons; primary chronic polyarthritis.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

SANUKEHL® Trich 5X (D5) Ampules
SANUKEHL® Trich 6X (D6) Drops

Active ingredient: Ampules: Trichophyton verrucosum extractum (lyophil., steril.) 5X (D5). Drops: Trichophyton verrucosum extractum (lyophil., steril.) 6X (D6).

Composition: 1 ampule of 1 ml contains: Medically active substance: 1 ml Trichophyton verrucosum extractum (lyophil., steril.) 5X (D5) aqueous dil. Other constituents: isotonic sodium chloride solution.
10 ml liquid dilution contain: Medically active substance: 10 ml Trichophyton verrucosum extractum (lyophil., steril.) 6X (D6) dil. Other constituents: purified water.

According to experience, to be administered in cases of: Mycosis of the hair, skin, nails, tinea, trichophytosis; impairment of skin function; hair loss.

Application: Unless otherwise prescribed: 1 ampule of 1 ml to be injected either intramuscularly or subcutaneously, 1-3 x weekly. For oral intake: 1-2 x daily 5-10 drops. For rubbing in: 1-2 x daily 5-10 drops into the bend of the elbow. Treatment of more than 8 weeks depends on the advice of the physician or health care professional.

Prof. Enderlein's Research in Today's View

Can his Research Results be Confirmed with Modern Techniques?

by Dr. Dr. Peter Schneider

"The best physician in us is love"
Paracelsus

The Modern View of Evolution

Questions regarding the origin of life are as old as humankind and each era tried to find an answer to this questions with the tools and means available at the time. Thus, evolution theory is also a central topic in modern science, uniting all areas of biology. The modern concept of evolution is basically not hard to understand; but many scientists still have great difficulties in integrating this concept into their work.

One major mistake, according to Colby, is the continuing assumption that the various species developed upwardly in the form of an "evolutionary ladder", from bacteria through lower and higher animals to, finally, man. Thus, man is the crown of evolution. This evolutionary theory basically goes back to the British student of natural sciences, Charles Robert Darwin *(1809 – 1882)*. He developed the concept of natural selection which, in a long lasting process, leads to changes through adaptation *(evolution)* and to the formation of all forms of life. His works greatly influenced biology and geology and even put their mark on the history of human thought.

However, according to modern thinking, evolution rather constitutes the changes in a gene pool over time. A gene is the unit of a genetic information which can be passed on unchanged over many generations. A gene pool is the sum of all genes in a species or a generation. At the present time the human genome is close to being fully decoded. This was driven by the expectation that it should finally be possible to detect diseases in a population in an early stage and to cure them by appropriate genetic corrections. Newest results in microbiology and laser microscopy, however, show that the DNA and RNA molecules, the chemical carriers of the genetic information, are not rigid biochemical structures that can be manipulated easily, but rather laser-active media *(Hartmut Müller, Raum & Zeit, 109, 2001, page 55)*. They generate optical holograms which are in resonance with electromagnetic fields of the earth, moon and galaxy and control both protein synthesis and embryogenesis.

This really means that the evolution of bacteria, plants, animals and humans always proceeds in a relationship with the earth and the overall universe. It shouldn't therefore come as a surprise that a renowned scientist such as Carlos Bustamente from Berkeley University is searching for "the work of God as an intelligent designer" in Coli bacteria.

Darwin's concept of evolution from two centuries ago is, of course, totally inadequate as a model for explaining these relationships. In the culturalanthropological view society at that time was in the machine era *(1st and 2nd Kondratieff cycle, see figure 1)* which quite naturally led to a mechanistic explanation of evolution.

As the figure shows our society right now is in the transition from the information age into the 6th Kondratieff cycle. The foundation for this event which enhances symbiosis and includes all of society, according to Nefiodow, will be the development of psycho-social and mental potentials – something immaterial in an increasingly material economy. The development of mental-energetic potentials in the new Kondratieff will decrease destructive behaviors and, at the same time, increase productivity in information management and improve cooperation, health and wellbeing. The modern theory of evolution therefore agrees exactly with this transition.

Prof. Günther Enderlein conducted his morphological studies approximately 100 years ago, in the transition phase to the 3rd Kondratieff. This was the era of chemistry and electrical engineering. Beyond microscopic methods and laboratory procedures for cultivating microorganisms there were hardly any other instruments available that would have made it possible to do research as we understand it today. However, already at that time, a darkfield microscope was standard equipment in any larger microbiological laboratory. Even now, we are still surprised about the relatively simple means with which researchers at the time

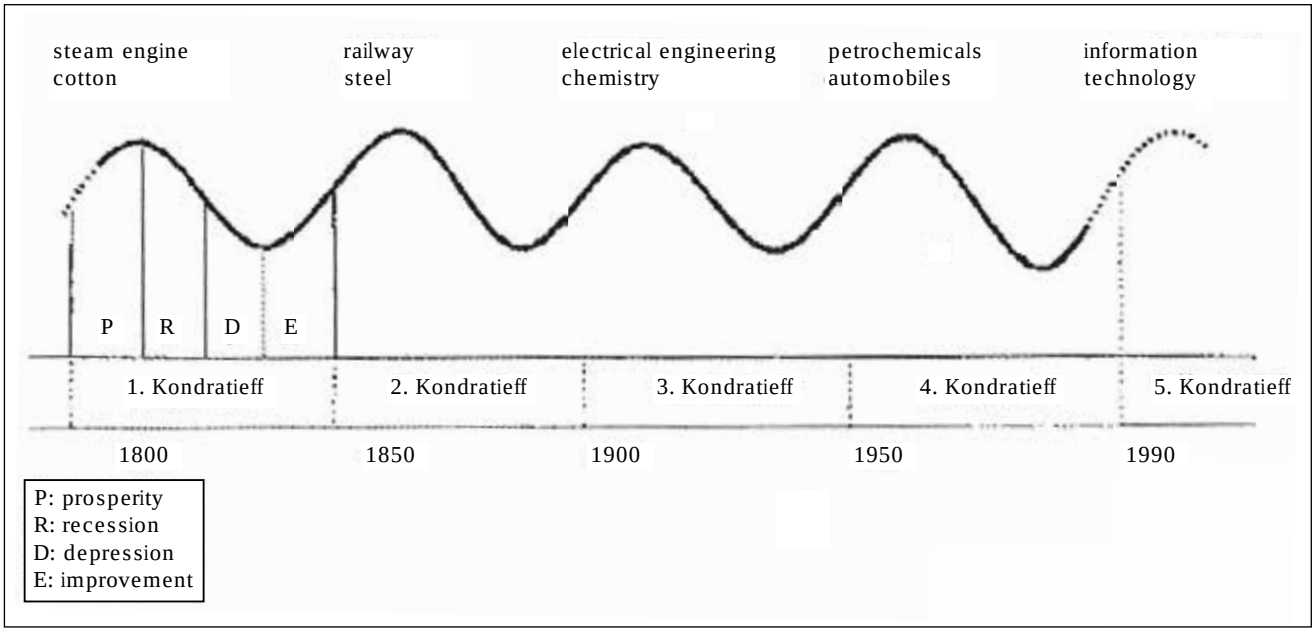


Fig. 1: The long waves of economic activity and its base innovations.
(source: L.A. Nefiodow, The fifth Kondratieff: Strategies for the structural change in the economy and society. Frankfurt am Main and Wiesbaden, 1991)

obtained many pioneering results which only today, with our modern laboratory methods, can be scientifically investigated and understood in detail. From the surviving research protocols of the time we can only imagine the great intuition and the hard work of these researchers.

Only after the fundamental research performed by the British biophysicists Francis Crick, Maurice Wilkins and Rosalind Franklin as well as the American biochemist James Watson which, in the early 50's of the last century, led to the discovery of the general DNA structure, an analysis of the genetic correlations on the molecular level became possible.

Theory of Endobionts

A significant result of Enderlein's research was the finding that there is a symbiosis of microorganisms in the human and animal body which he termed "endobionts". Enderlein was very well aware of the fact that this designation could be no more than a summary term for a variety of very different microorganisms. Without mentioning Enderlein as originator the endobiont theory has been increasingly confirmed over the last 20 years, among others by means of modern molecular biology methods, and already forms a constant part of the content in many English textbooks. The modern term coined by Prof. Max Taylor of the University of British Columbia, Vancouver, Canada, is "serial endosymbiont theory" (SET). The genesis of this term and the correlations are described in the recommendable and descriptive book "Symbiotic Planet - A New Look at Evolution" by Prof. Lynn Margulis (Perseus Books, 2000).

The serial endosymbiont theory says that unicellular organisms, plants, fungi, animals and humans are the product of a symbiogenesis - this is formation of new organs and organisms by symbiotic fusion - of at least two to four life forms. This minimum number could be confirmed by extensive genetic investigations. The nucleocytoplasm, the base substance of cells, originates from archebacteria, and most of the protein-synthesizing metabolism is derived from thermoacidophilic bacteria. The aerobic mitochondria formed from bacterial symbionts which we call "purple bacteria" or "proteobacteria" today. And finally, chloroplasts and other plastids from algae and plants were once free-living cyanobacteria. Back at around 1950 Hugo Schanderl already succeeded in retroculturing the original symbiontic bacteria from mitochondria in the laboratory. With modern laboratory methods it is possible to show the existence of a large number of vastly different endobiontic guests in the cells of the human body, in addition to the bacterial forms already mentioned. These organisms are mostly present as "cell wall deficient forms" (CWD) and are not detected by routine microbiological methods. Thus, about 30% of healthy people were found to be carriers of endobiontic types of bacilli in the erythrocytes; a recently published study in Canada also found evidence of genetic material from bacteria of the pseudomonad

type in erythrocytes of healthy donors *(Richard McLaughlin "Naturally-occurring Pleomorphic Microorganisms in Human Blood", published in "Pleomorphic Microbes in Health and Disease", Holger N.I.S., Inc., 1999).*

Already one hundred years ago Enderlein directly observed CWDs in the darkfield microscopy images of blood. According to findings of newer microbiological research the still common teaching that human blood and tissue are sterile must be regarded as being outdated. Symbiogenesis cannot be looked upon as a static, closed event but it still proceeds today in a very dynamic way by continuously channeling the DNA and RNA of microorganisms in and out of body cells. Especially in today's age of globalization more and more people are in continuous contact with new microorganisms with which a busy exchange of genetic material occurs. Whether and to which extent this material is integrated into the human genome always depends on the milieu situation of the human host, on the infective pressure of the microbes and, in particular, on the resonance with the above-mentioned electromagnetic fields.

In this context the genetic modification of microorganisms, a widespread practice today, must be viewed very critically. It is performed on an industrial scale, e.g. in the food or pharmaceutical industry, to imprint new properties onto bacteria. It cannot be excluded with certainty that the modified genes will be permanently integrated into the genome of mammalian cells, with unpredictable results.

In addition to the apathogenic, endobiontic bacterial forms which peacefully coexist with the host to both partner's advantage there is a variety of pathogenic microbes that can also be present as cell wall deficient forms. The reason for the formation of such forms is always found in blood and tissue milieu shifts. Relevant background information and therapies are described in detail in the article "Die tuberkulinische Konstitution als gemeinsame Ursache chronischer Erkrankungen und ihre naturheilkundliche Regulationstherapie" *("The tuberculinic constitution as common cause of chronic diseases and their naturopathic regulation therapy") published in SANUM-Post No. 51, pp. 4-18.*

A comprehensive review of apathogenic and pathogenic CWDs and their significance is found in the textbook "Cell wall Deficient Forms – Stealth Pathogens" by Lida Holmes Mattman (CRC Press, 3rd edition, 2001).

Pleomorphisms of Bacteria

Without doubt Enderlein's discovery of the "pleomorphism" (polymorphism) of microorganisms was his most controversial for many decades. Enderlein coined this term based on his then observation that bacteria and fungi presented in the darkfield microscope in a variety of different forms. Even today conventional teaching often holds the view of two centuries ago that microorganisms can only exist in unchangeable forms.

However, conventional clinicalmicrobiological research, in particular over the last 10 years, realized more and more that the pleomorphism of microorganisms holds some very important aspects with regard to diagnosis and therapy of many chronic diseases. These studies also revealed that pleomorphism follows certain patterns. Such regularities, e.g. the development cycle of bacteria, have already been described in detail by Enderlein in his major works "Bakterien-Cyclogenie" *("bacterial cyclogeny")* and "Akmon". However, even today, it is still very difficult to reproduce them on the molecular level in the laboratory outside the living host organism.

Starting point for Enderlein's research was the observation of the French chemist and pharmacist Antoine Béchamp in the 19th century that, under well defined conditions, certain microorganisms can be present in different forms and development stages, from lowest grades up to the large, highly developed stages of bacteria and fungi. He found that all animal and plant cells contained tiny protein grains *("microcymas")* which did not perish after the death of the organism itself and were the reason for fermentation, and also that other microorganisms could develop from them. These microcymas were thought to be in each living being, in humans, animals and plants, to be eternal and indestructible and to constitute the transition between non-living and living matter. Given some specific or pathogenic influence these microcymas could develop into bacteria with putrefacient and fermenting properties. Thus, the origin of diseases would lie primarily inside the body.

Enderlein later called these protein grains "protits". Starting from such a protit, microbes go, according to Enderlein, through a species-specific cycle. He coined the term "cyclogeny" to describe the changes and migration of pathogenic and apathogenic microorganisms through all phases *("valencies")*, starting below the limit of microscopic visibility, the

realm of viruses, through the higher-valency phases of cocci and rods, up to the "culminant" phases of the fungi. The bacterial nucleus *("mych")* is of particular significance. Even though it was known already before Enderlein's time its function was not properly interpreted. According to the "anatartic fundamental law" formulated by Enderlein the increase in the microorganisms' valency depends on the prevailing milieu in blood and tissue which is primarily determined by the pH value. Bacteria can multiply either asexually by division or budding *("auxanogeny")* or sexually after a preceding nuclear fusion *("probaenogeny")*. According to Enderlein sexual propagation is always the prerequisite for phasal upward or downward development.

More recently Christopher Gerner, assistant at the Tumor Research Center Vienna, has tried to biochemically characterize this protit. The results of this research were published in "Curriculum oncologicum" 01 and 03, year 7, 1997. As starting material for his studies Gerner used 10 ml of blood from the vein of a fasting patient. To destroy the erythrocytes 2 ml of blood were mixed with 4 ml of distilled water and thoroughly shaken. The hemolysate was then incubated for 3 days at 37ºC. The residual 8 ml of blood were left at room temperature. Then the samples were centrifuged and 1 ml each of hemolysate and blood serum were mixed. This mixture was filtered sterile and again incubated at 37ºC. Darkfield microscopy then showed small grains which the author classified as being identical with the protit observed by Enderlein. Then the alleged protits present in this material were purified and subjected to a thorough biochemical analysis. Gerner determined globin, a degradation product of the erythrocytes, as being the main constituent of the alleged protits. This result is not surprising, however, since such degradation products of erythrocytes have been known for a long time as so-called "Heinz bodies". They probably formed in the incubation of the hemolysate and therefore have nothing to do with the protits according to Enderlein, as the lowest development phase of microbes. At least the author did not present proof of a development of microbes from the observed "darkfield bodies".

Modern microbiological thinking classifies the structures termed protits by Enderlein as probably being "nanobacteria". Nanobacteria were discovered by the Fin Olavi Kajander, University of Kuopio, only about 10 years ago. These organisms which can grow both inside and outside of mammalian cells show a diameter of 0.2 to 0.3 µm and are thus as small as viruses; being able to withstand temperatures of 90ºC for 1 hour, they exhibit a remarkable thermostability. They produce biogenic apatite, a major constituent of our bones. Analysis of their genetic structure points to them being proteobacteria. As already mentioned above these endobiontic bacteria gave rise to the mitochondria of cells a long time ago. Therefore the protits observed in the darkfield image which, by the way, are present in blood in huge quantities after eating larger amounts of meat, probably represent agglomerations of nanobacteria from the mitochondria.

The primeval cell was called "mychit" by Enderlein, and it contains one nucleus *("mych")*. The mychit is of spherical form with the nucleus being positioned completely or nearly completely against the wall. The following darkfield microscopy image *(figure 2)* shows an agglomeration of such mychits in blood serum.

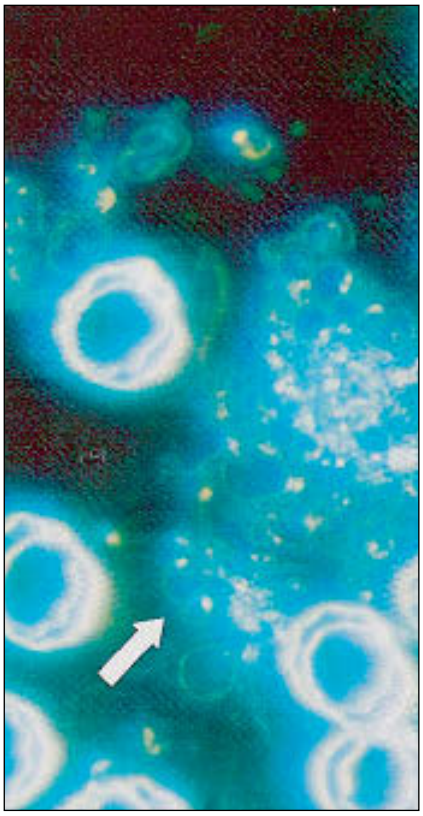


Fig. 2: "Mychits" in the darkfield microscopy image (from Bleker, M.-M.: Blutuntersuchung im Dunkelfeld nach Prof. Dr. Günther Enderlein (Blood examination in the darkfield according to Prof. Dr. Günther Enderlein), 2nd edition, Semmelweis, 1997)

According to the new microbiology nomenclature these structures belong to the "cell wall deficient bacterial forms" *(CWD)*. They have been very extensively investigated by conventional microbiology in the last few years, in particular in the context of chronic borreliosis (Lyme disease). They can detach from the Borrelia and are then called "bleb" *(figure 3)*. Blebs can be of highly variable size and were detected for other pathogenic bacterial forms as well.

Fig. 3: Blebs from Borrelia burgdorferi (from the internet site: www.lymenet.org)

In 1996 Preac-Mursic et al. published, in the journal "Infection", a corresponding scanning electron microscope image (figure 4) which W. Burgdorfer presented as figure 14 in "The Complexity of Vectorborne Spirochetes (Borrelia spp)" at the "12th International Conference on Lyme Disease and Other Spirochetal and Tick-Born Disorders", NewYork City, April 9-10, 1999.

Borrelia burgdorferi (Bb) was cultured at 33ºC in the modified Kelly-Pettenkofer culture medium *(MKP medium)*. The image was taken 48 hours after addition of penicillin: two sphere-like bodies are attached through a weak connection to the spiral of a *Borrelia* organism. *Figure 5* gives arepresentation of such a structure.

The very thin wall *(relative to gram-positive bacteria)* of the CWDs is no barrier for the passage of small molecules such as antibiotics whereas the outer and the cyctoplasmic membranes very actively determine the permeability.

- The outer membrane forms a barrier for β-lactam antibiotics.
- β-lactam antibiotics bind to penicillin-binding proteins (PBP) and the β-lactamases of the outer membrane.
- The targets of all other antibiotics are inside the cyctoplasmic membrane. Bacteria can develop resistance against these agents by preventing an agglomeration of the substances inside of the cytoplasmic membrane.

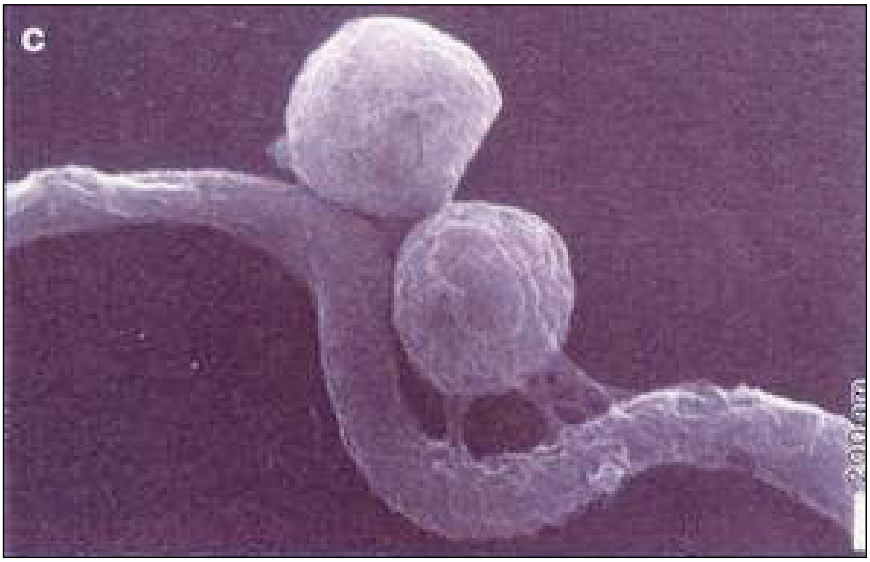


Fig. 4: Mychits from Borrelia burgdorferi in the scanning electron microscope image

Chronically ill patients, especially those with neuroborreliosis showing the clinical symptoms without an increased antibody titer in the blood serum, are a big problem in borreliosis therapy. Unfortunately these patients are often accused of simulating the disease. Conventional wisdom says that an antibiotic therapy makes little sense in these cases.

By incubating Borrelia in the laboratory with spinal fluid the bacteria mutate within 1-24 hours to cell wall deficient mychits. By further cultivating the mychits in normal medium they revert within 9 -17 days back to "normal" Borrelia forms *(Brorson and Brorson, 1998)*. Cell wall deficient Borrelia forms can persist in the organism for long periods of time. The cell wall dependant antibody titers disappear with the formation of mychits, e.g. after antibiotic therapy. After having reverted back to the normal bacterial forms the corresponding titers reappear *(Mursic et al., Infection 24, 1996, pp. 218-226)*.

SANUM Therapy of Borreliosis

An important goal of the SANUM therapy of borreliosis is the regulation of the cell wall deficient Borrelia forms with the hapten preparation SANUKEHL Brucel. The mode of action of the SANUKEHL preparations is described in SANUM-Post No. *54, pp. 2-6*.

At the same time a naturopathic therapy of borreliosis must also regulate the energies of the congested meridians. Very often a meridian congestion can be recognized by the localization of the tick bite and the usually visible erythema migrans that follows. Ticks and blood-sucking insects are known to be very eager for the vital energy found in a congested meridian.

- for alkalization ALKALA N Powder daily
- 2 x weekly one injection of NOTAKEHL 5X i.v.
- daily in the evening 8 drops of SANUKEHL Brucel 6X (take 4 drops orally and rub in 4 drops simultaneously)
- in addition once weekly 1 capsule of LATENSIN alternating with RECARCIN and UTILIN "S" (start each with 6X and move up after some weeks as required to the 4X)

(modified treatment according to Günther Witt, naturopath)

Enderlein's View of this Relationship

Apart from the now established pleomorphism of bacteria another feature of Enderlein's theory is the relationship of bacteria to fungi.

According to Enderlein colloids of the fungi strains *Mucor racemosus Fresen and Aspergillus niger van Tieghem*, which represent transitions to higher forms, have been living in humans and in all mammals for millions of years. They are present in healthy organisms in primitive forms which have an important regulatory function in the metabolism.

For various reasons – infection, wrong nutrition, unnatural living environment, mental depression, age effects etc. – these primitive forms can change into higher stages according to Enderlein, making them parasitic. An infestation by the parasitary phase can be detected in blood by darkfield microscopy. Then the valency of the parasites can be determined.

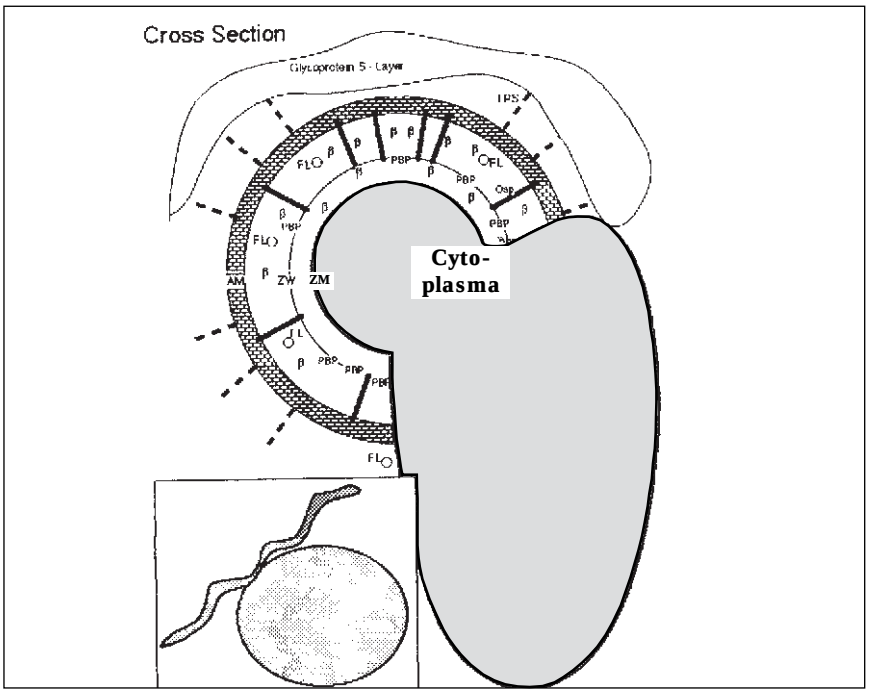


Fig. 5: Representation of a spirochete with bleb (= mychit); top view (bottom left) and cross section (according to Preas Mursic et al., 1996, ("Two spherical bodies adhering to the middle of a Borrelia organism") and Brorson and Brorson, 1998). The surfaces outside the cytoplasmic membrane, that is the cell wall (ZW = cell wall), and the outer membrane (AM = outer membrane) are dissolved by endogenic bacterial lysozymes (dissolving enzymes) during growth. If, through the use of penicillins or the action of the immune system, the equilibrium between bacterial dissolution and reconstruction is disturbed, cell wall deficient forms develop where the cyctoplasmic membrane (ZM = cytoplasm membrane) and the flagella become visible from the outside (from the internet site:www.lymenet.org).

In over 40 years of intense research Enderlein has observed the changes and development of the parasites in their various forms, as well as their cycle. Only after he was in the position to present the biological and biogenetic basis of these parasites, therapeutic countermeasures could be developed. This led to the "isopathy" concept which said: The various higher forms observed are reduced to lower forms by appropriate medication and leave the body through the excretory organs.

Enderlein's original microorganism strains and the original formulas for his medications were acquired exclusively by SANUM-Kehlbeck company 25 years ago.

This microorganism which everywhere penetrated into the mammalian cycle millions of years ago was called "endobiont" by Enderlein. The presence of *Aspergillus niger van Tieghem* and *Mucor racemosus Fresen* in the body can be regarded as cause for a number of disorders. Whereas the *Aspergillus* phases are relatively rarely seen in a pathogenic stage only in tuberculous and paratuberculous diseases – the *Mucor symbiosis* as the proper "endobiosis", in its pathogenic stages, is much more often involved in the development of pathologic functions or changes. There is no warm-blooded organism which has not acquired this "endobiont" diaplacentally and harbors at least its primitive forms in its cells and body fluids for life.

According to Enderlein this fungal parasite mutates through all its development stages in the body and can infiltrate tissues and organs to va-

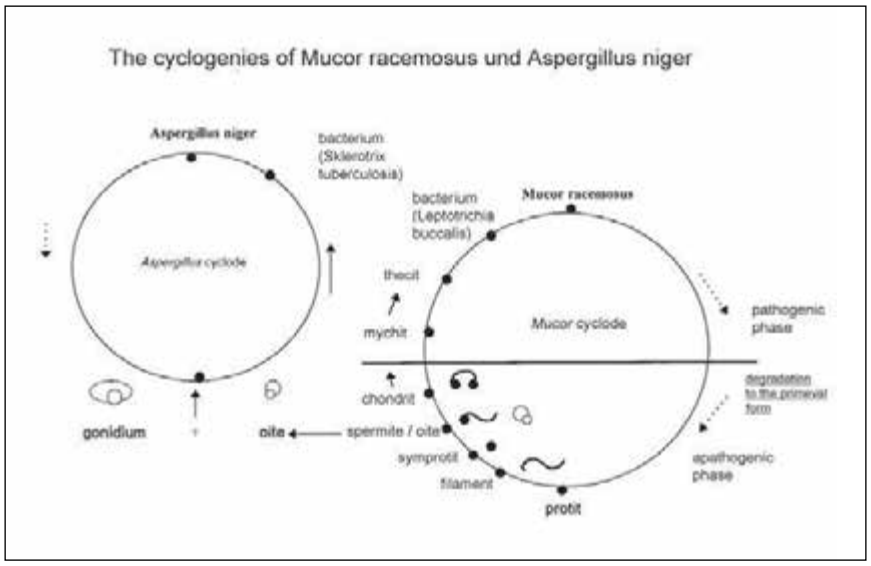


Fig. 6: Hypothetical separation of the cyclode of Aspergillus niger from the cyclode of Mucor racemosus (Arnoul, 1998; Rau, 1998)

rious degrees. For instance, it can lead to stasis in the circulating body fluids which in turn leads to dysfunctions in various directions. The slightest impairment of a tissue or an organ leads to an increased valency of the endobiont and thereby further weakens the sick organism. This situation explains the various manifestations of diseases seen in humans and animals. Figure 6 shows a hypothetical representation of the development cycles for these two fungi according to Enderlein.

The development process of the endobiont shows, in its primeval stage, initially the most primitive form: the colloid stage. Colloids are extremely tiny protein particles which grow and pass through several intermediate stages and then can enter into the bacterial stage. After several further stages within this development cycle, stages which can give rise to a wide variety of chronic diseases, the last stage of the cycle is the fungus and this is were the cycle starts anew. Thus, according to Enderlein, the endobiont goes through three fundamental development phases: colloid – bacterium – fungus which, up to now, were regarded as independent, unchangeable organisms. Prof. Enderlein demonstrated this development process and said that all these stages together form a single common cycle which originates from the completely identical, unstructured, colloidal and motionless protein material contained in the respective cells. These protein particles of the primitive stages are in the size range of bacteriophages and viruses *(approx. 0.01 µm)*. Under certain conditions this mass can release forms that had developed in a disease-generating environment and continue to circulate in the cycle. They replicate and form an endless number of different shapes and forms. They increase in size and finally develop into bacteria when the surrounding milieu changes *(in humans, for instance, by nutrition consisting mostly of animal proteins and fats)*.

However, according to Enderlein, the higher forms can also regress to lower stages when the so-called chondritins *(lower, apathogenic development stages)* in the respective isopathic medications combine with the higher-valency forms. The degradation products formed in this process must be excreted by the body. If this excretion does not proceed quantitatively in case of disease an upward development can reestablish itself.

Enderlein's view of the special importance of the two fungi *Mucor racemosus and Aspergillus niger* has not yet been sufficiently confirmed by today's microbiological research. However, other researchers arrived at similar conclusion as Enderlein did, based on their own research. And finally the very successful therapies with isopathic medications according to Enderlein strongly support the, at least partial, correctness of Enderlein's theory.

Pathogenic Bacteria as Regressed Fungi

Fungi are plant-like entities without chlorophyll. They therefore cannot photosynthesize with the aid of sunlight and are dependant on foreign organic matter. In the human body, they are parasites rather than symbionts. Similar to bacteria, fungi can also be present as cell wall deficient forms. However, this is mostly an expression of a highly shifted milieu with a weakened immune defense, such as in Kaposi's sarcoma.

Some characteristics of fungi (according to Tom Volks, University of Wisconsin-La Crosse, USA):

- They are eukaryots, i.e. they have cells with a nucleus and complicated organella such as mitochondria.
- Replication by means of spores.
- Sexual and asexual spores can be formed.
- Fungi show, similar to plants, heterogenesis.

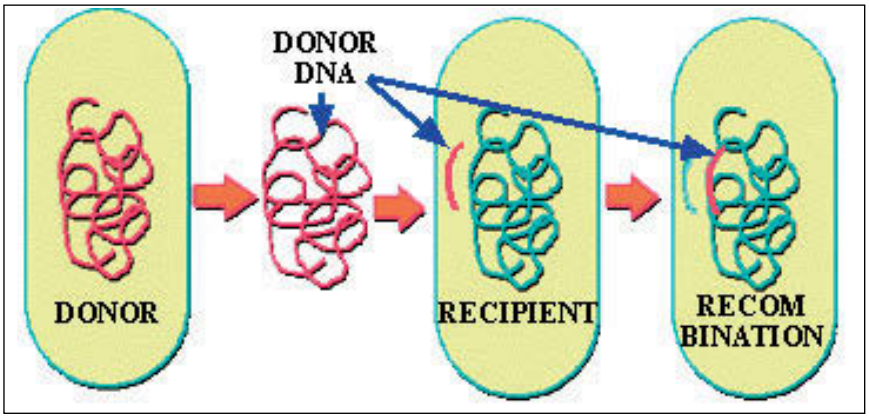


Fig. 7: Bacterial sex – bacterial exchange of DNA (from the Internet: http://www.slic2.wsu.edu:82/hurlbert/micro101/pages/Chap.9.html)

- The vegetative body can be unicellular (yeasts) or be present as hyphen.
- The cell wall structure resembles that of plants, the composition, however, differs.
- The fine structure of the cytoplasm is similar to plants, the organellas, however, are different.
- Fungi use exoenzymes to first digest their food extracellularly and then ingest it.
- New molecular research suggests that fungi are closer to animals than to plants.

The properties suggest that many fungi have originally been plants during the evolution. They lost their chlorophyll in the course of evolution and adapted to a parasitic life style.

The majority of pathogenic bacteria seem to belong to these parasitic fungi as well. Another important finding of Enderlein which supports this assumption was the fact that bacteria can replicate sexually. This mode of replication is, according to Enderlein, always a prerequisite for the upward or downward development of the phases.

The discovery of sexual replication of bacteria was taken up by the Americans Joshua Lederberg and Edward Lawrie Tatum, and published in 1946 in the USA. In 1958 Lederberg, together with Tatum and George Wells Beadle, was awarded the Nobel prize for medicine "for his discoveries concerning genetic recombination and the organisation of the genetic material of bacteria". During copulation certain bacteria, e.g. E. coli, transfer a small fragment of their DNA to a receiving bacterium *(figure 7)*. This recombination is the equivalent of the sexual replication in eukaryots.

Sexual replication is very unusual for bacteria since it occurs only with higher organisms. According to Enderlein it is the base for the therapeutic success with isopathic-homeopathic SANUM medications prepared from molds. As emphasized by Dr. Thomas Rau *(Das isopathische Prinzip – Medikamententestung mit Hilfe der Dunkelfeldmikroskopie (The isopathic principle – testing of drugs by means of the darkfield microscope), SANUM-Post 53, p. 9, 2000)* the degradation of the high-valency fungal forms in blood after addition of the appropriate isopathic SANUM medication can be directly observed by examining a freshly taken blood sample under the darkfield microscope.

The studies of Franz Gerlach and Hans Harmsen provide further confirmation for a core statement in Enderlein's theory that bacteria and fungi are only different representations of a specific species. *(Gerlach: "Krebs und obligater Pilzparasitismus" ("Cancer and obligatory fungal parasitism"), Urban & Schwarzenberg, 1948, reprints as 2nd edition published at Semmelweis-Verlag, 1998) (Harmsen: "Zur Morphologie der Erreger der Tuberkulose" ("About the morphology of the germs causing tuberculosis"), Klinische Wochenschrift 30, 817-819, 1952).*

Gerlach was able to show the regular presence of a microorganism in all spontaneously formed, malignant growths in humans and animals, both in the primary tumors as well as in the metastases and in recurrent growths. This organism showed a remarkable pleomorphism: The major mass usually formed small granular forms, in the cyctoplasms of cells as well. In addition there were larger spherical entities which we now call blebs and which sprouted from one or several locations along the periphery. This involved the formation of filaments of various lengths which each formed a small sphere at their free ends. In addition small granules with strand-like appendices, free filaments, ring shapes, irregular bloated forms and branched mycelia with attached granular forms were observed. According to Gerlach all these forms originated from one and the same parasitic fungus which was termed micromcyete.

When laboratory animals were infected in various ways with pure cultures of this fungus, in most cases a general disease of the organism resulted similar to that found in the cadavers of carriers of spontaneous tumors. Clinically the disease was often not

detectable and pathologically-anatomically only after thorough examination. Most prominent were exudative processes in the large body cavities. Microscopic examination always showed tumor mycetes in pure state. The fungus spreads in the infected organism by septicemia. According to Gerlach it can give rise to a variety of diseases including bacterial infections in cattle and sheep, and it is an obligatory parasite in all malignant growths.

Harmsen also observed a prominent pleomorphism of the tubercle bacterium. The acid-fast rod form of this bacterium, nearly exclusively used for routine diagnostics even today, is just one state of many of this bacteria. These forms are highly variable and include small phases that can be filtered, vacuoles, granules, acid-labile and acid-stable rods, up to fungus-like structures with hyphen and mycelia. Dostal already noted in 1910 *(Wiener Medizinische Wochenschrift, p. 2100, 1910)*: "I now tend to think that the tubercle bacilli are the parasitic states of certain molds" *[citation from the publication of Harmsen]*.

The long persistence of the *Mycobacterium tuberculosis* DNA in normal lung tissue without histological detection was recently confirmed in a study by Norwegian researchers *(R. Hernández-Pando et al.: "Persistence of DNA from mycobacterium tuberculosis in superficially normal lung tissue during latent infection", The Lancet 356, 2133-2137, 2000)*. The tests were performed on patients who had died from tuberculosis as well as from other diseases. The bacterial DNA could be detected with genetic research methods, not only in macrophages but also in other cells. Interestingly, this DNA was not only found in all patients who had died from tuberculosis but also in approximately one third of those patients dead with other diseases. However, this included only patients from countries where tuberculosis is endemic, such as Ethiopia and Mexico. In patients from Norway which is considered as being free of tuberculosis, no bacterial DNA could be detected.

The treatment of tuberculosis and other so-called "tuberculinic diseases", such as degenerative diseases *(MS, Parkinson, diabetes etc.)* or cancers has for decades successfully included the isopathic-homeopathic SANUM preparation NIGERSAN, in addition to the indispensable milieu therapy, for instance by correcting the cell respiration, correcting the acid-base equilibrium, correcting the electrolyte balance, and immunomodulation. This preparation was developed by Enderlein and contains colloids from the mold *Aspergillus niger*. Its activity is thought to involve degradation through copulation of the *Mycobacterium tuberculosis* which, according to Enderlein, is a highly developed phase of Aspergillus, by the lower development stages contained in the preparation. According to present knowledge the copulative inactivation of higher development phases by lower phases seems to be the only logical explanation for the fact that lower development forms can interact at all with higher forms. □

First published in the German language in the SANUM-Post magazine (56/2001)

Statistical Evaluation of an Application Study with Sanukehl Acne 6X Drops

by Dr. Reiner Heidl

1. Introduction

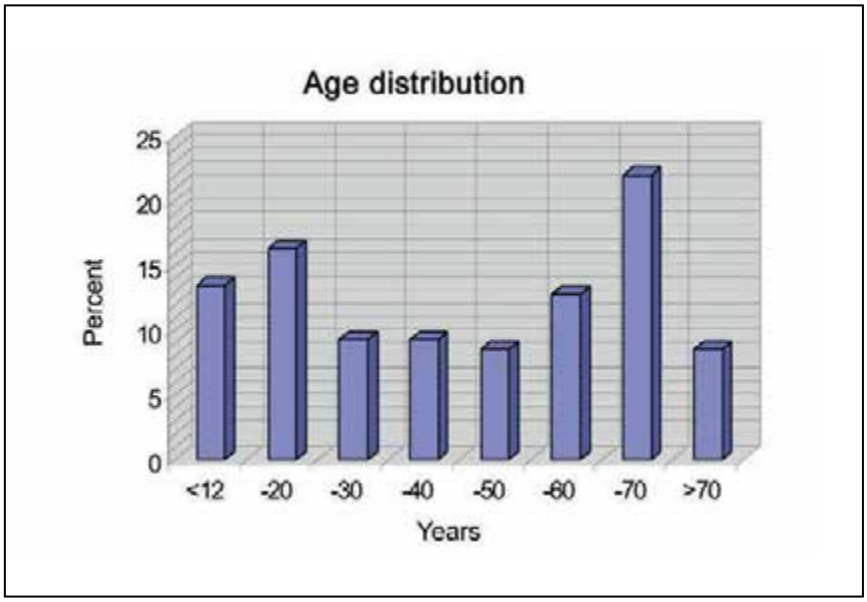
From August 1992 to April 2000, a total number of 141 patients was admitted to an observation study with the preparation SANUKEHL Acne 6X drops in one internist practice and two general practices. The homeopathic test preparation SANUKEHL Acne consists exclusively of the 6th decimal potency of Propionibacterium acnes.

The aim of the observation study was to establish the actual application of the preparation and its tolerance under the conditions of everyday practice. Further, knowledge concerning the acceptance of the preparation on the market, also amongst children, should be gained.

In accordance with the structure of the study, exclusively descriptive statistical procedures were used. The application of inductive methods was not indicated. An "intention to treat" evaluation was carried out, i.e. all patients were considered who had received at least one dose of the remedy.

2. Participating Patients

141 patients participated in the study, 75 men (53.2%) and 65 women (46.8%); there was no data on one of the patients. The age of the patients varied between 10 and 91 years with an average of 42.2 years and a standard deviation of 23.2 years. The age groups of under 12-year-olds (13.5%), 13 to 20-year-olds (16.3%), and 51 to 60-year-olds (12.8%) were almost the same size. Also of comparable sizes were the age groups of 21 to 30 years and 41 to 50 years at 9.2% and 8.5%. The biggest age group was that of 61 to 70-year-old patients with 22.0%. Finally, 8.5% of the patients were over 70 years old. In the age distribution, the men with an average age of 45.5 ± 22.3 years were on average 7 years older than the women with 38.4 ± 23.6 years.

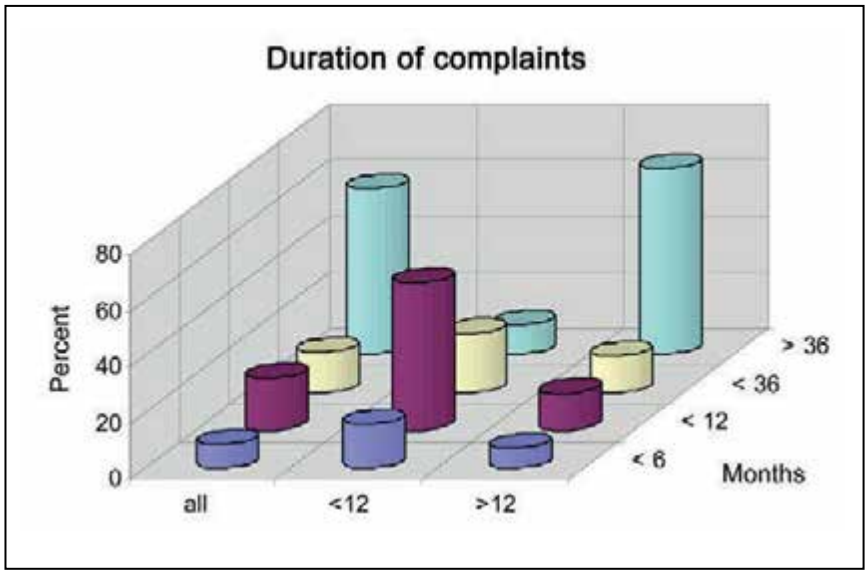


Height varied between 121 and 190 cm with an average value of 163.1 ± 16.4 cm. Weight varied between 33 and 108 kg with an average weight of 67.0 ± 18.1 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to prescription had to be recorded in the study protocol. It became apparent that SANUKEHL Acne 6X, in accordance with Isopathy, is used in a very wide area of application. The preferred application was dependent on the age of the patients. The main areas of application were acne, migraine, venous and cerebral blood circulation disorders as well as arthritis. Medical findings were collected before and after completion of the treatment. Accompanying therapies were to be documented in the survey form.

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol for how long the disease or com-



plaints had been existent. Time frames were given of less than six months, up to one year, up to three years and more than three years. In only 8.5% of the patients, the complaints had existed for less than six months. In 18.4% of the patients, the complaints had existed for six to 12 months, in 14.2% for one to three years. More than half of the patients (58.9%) had suffered from the medical conditions for more than 36 months. In the patient group of under 12-year-olds, the duration of the complaints was dominated by acute conditions. Thus, 15.8% of the patients had suffered from their complaints for less than 6 months, but 52.6% for a period of 6 to 12 months. Only 10.5% of the patients had suffered from their complaints for more than 3 years. In the adult group over 12 years, the chronic duration of complaints of more than 36 months was especially pronounced with 66.4% of the patients. Only 7.4% had acute complaints with a duration of up to 6 months, while the percentages of patients with a duration of complaints of 6 to 12 months and 1 to 3 years were the same at 13.1%.

7 of the 141 patients included in the study, all of them over 12 years old, had been treated with SANUKEHL Acne 6X drops previously.

Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	8.5	15.8	7.4
12	18.4	52.6	13.1
< 36	14.2	21.1	13.1
> 36	58.9	10.5	66.4

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

Corresponding to the nature of an application study, the doctor was not given a fixed schedule for the final examination. This final examination was carried out after a period of 15 to 434 days with an average value of 158.3 ± 146.7 days.

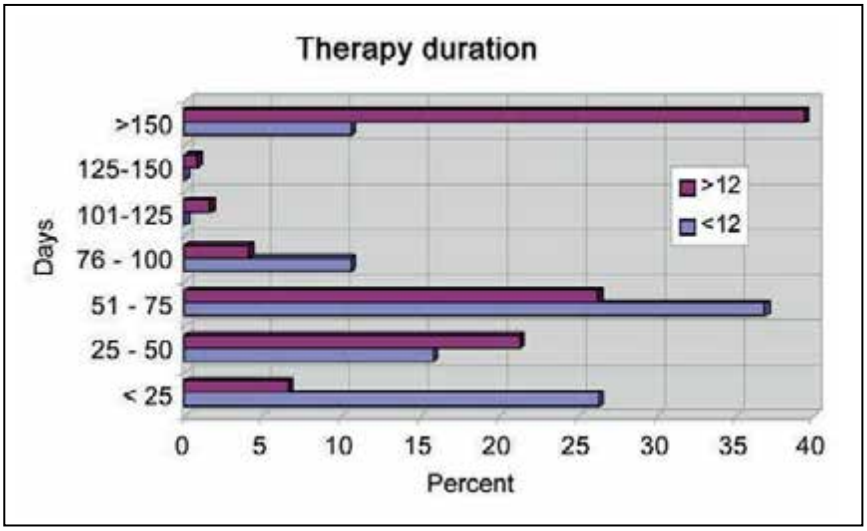
Therapy duration for the children (< 12 years) with 80.3 ± 100.4 days on average was only half as long as that for the adult group with 170.4 ± 149.0 days. The large range within the age group of under 12-year-olds is caused by two patients with a therapy duration of 366 days. Disregarding these two outliers, the result would be quite compact at 46.6 ± 23.3 therapy days. A differentiated analysis according to therapy periods offers a clearer picture. Thus, in the under 12-year-olds, the short therapy of up to 75 days was clearly predominant (88.2% of all patients). In the adult group, the largest subgroups were those with more than 150 therapy days and with a therapy duration between 51 and 75 days with 39.3% and 26.2%, respectively.

3.2 Dosage

Dosage was prescribed according to the package leaflet as follows:

For oral intake: acute conditions: 5 to 10 drops every 12 to 24 hours; chronic forms: 10 drops every other day.

For rubbing in: every 1 to 2 days 5 to 10 drops into the affected area or the hollow of the elbow.



After 8 weeks, the therapy should be discontinued for several months.

The drops were taken in by 109 patients and rubbed in by 114 patients. Multiple designations were necessary, because 82 patients took in as well as rubbed in the drops. The following table shows the medium dose of each administration form. The dosages for drops indicate the daily dose for taking or rubbing in.

The dosage recommendations were complied with. In the group of under 12-year-olds, the drops for oral intake were dosed age appropriately. The embrocation was dosed equally in the children and the adult groups. The medium dose of oral intake and embrocation in monotherapy was almost twice that in combination therapy.

4. Comparison with Former Therapy

7 adult patients had received a previous therapy with SANUKEHL Acne 6X drops within the last 5 years. This group is too small to compare first and multiple users. By comparing efficacy and tolerance in the two patient groups of first users and multiple users, evidence for a possible sensitization to the active ingredient could be determined. It is, however, remarkable that the patients as well as the doctors of these multiple users evaluated tolerance as “very good” in 3 cases and as “good” in 4 cases.

5. Efficacy and Tolerance

5.1 Evaluation of Efficacy by Doctor and Patient

In a final assessment, doctors and patients were asked to evaluate efficacy and tolerance. Efficacy could be rated as “very good”, “good”, “moderate” or having “no effect”. Further, doctors were asked to evaluate the patients’ compliance, which also could be rated as “very good”, “good”, “moderate” or “poor”.

The evaluation of efficacy showed that 35.5% of the patients rated efficacy as “very good”, 45.4%

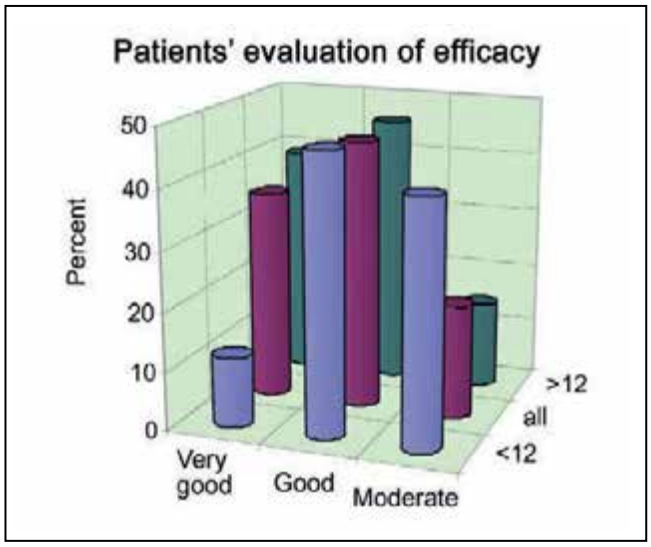
Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	12.9 ± 7.3	3	20
Drops (topical)	8.0 ± 3.7	3	15

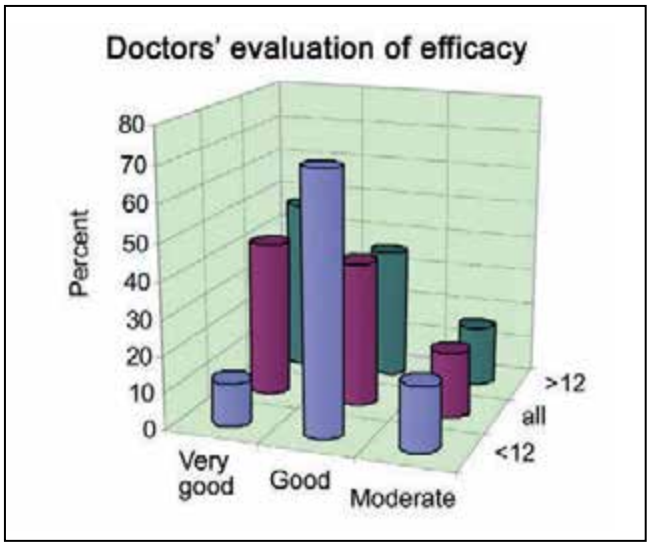
All Patients under 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	7.4 ± 4.0	3	16
Drops (topical)	7.7 ± 3.4	3	12

All Patients over 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	13.8 ± 7.4	3	20
Drops (topical)	8.1 ± 3.8	5	15

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	19.5 ± 2.0	10	20	Mono
Drops (oral)	10.7 ± 7.2	3	20	Combi
Drops (topical)	11.3 ± 3.9	5	15	Mono
Drops (topical)	6.8 ± 2.8	3	12	Combi

Evaluation of Efficacy								
Patient group	**Patients' opinion [%]**				**Doctors' opinion [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	35.5	45.4	19.1	0	42.6	39.7	17.7	0
< 12 years	11,8	47.1	41.2	0	11.8	70.6	17.6	0
> 12 years	39.3	45.9	14.8	0	47.5	36.1	16.4	0





as "good", whilst for 19.1%, the treatment's efficacy was "moderate". The result of the doctors' evaluation of efficacy was just as positive as that of the patients. The doctors rated efficacy as "very good" in 42.6% of the cases, as "good" in 39.7%, as "moderate" in 17.7%. No doctor and no patient evaluated the treatment as having "no effect". In the adults' group, efficacy tended to be rated better; compared with the childrens' group, there was a shift from "good" to "very good" in the evaluation.

Compliance (N = 139) was judged as "very good" in 71 and "good" in 54 patients by their doctors, hence 88.6% of all patients participating in the study were given a "good" or "very good" compliance rating. For 14 patients, compliance was judged as being "moderate" and "poor".

5.2 Evaluation of Tolerance by Doctor and Patient

To conclude the examination, an evaluation of tolerance was submitted by doctors and patients, wherein tolerance could be rated as "very good", "good", "moderate" and "poor". 60.3% of the patients and 58.2% of the doctors rated tolerance as "very good", while 39.0% of the patients and 41.1% of the doctors attested "good" tolerance to SANUKEHL Acne. "Moderate" tolerance was stated in one case each (= 0.8%). "Poor" tolerance was attested to the preparation in no case.

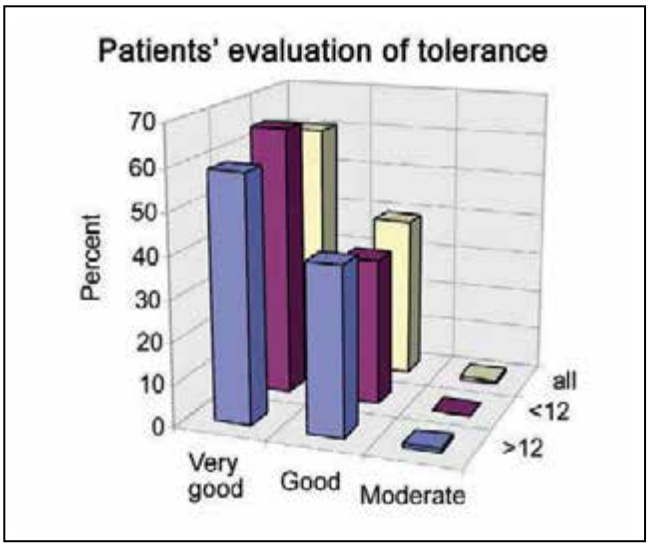
In the age group of under 12-year-olds, tolerance was rated a bit better in the gradings of "very good" and "good" by the patient than in the age group of over 12-year-olds. Further, in the young age group, there was no case of "moderate" or "poor" tolerance rating.

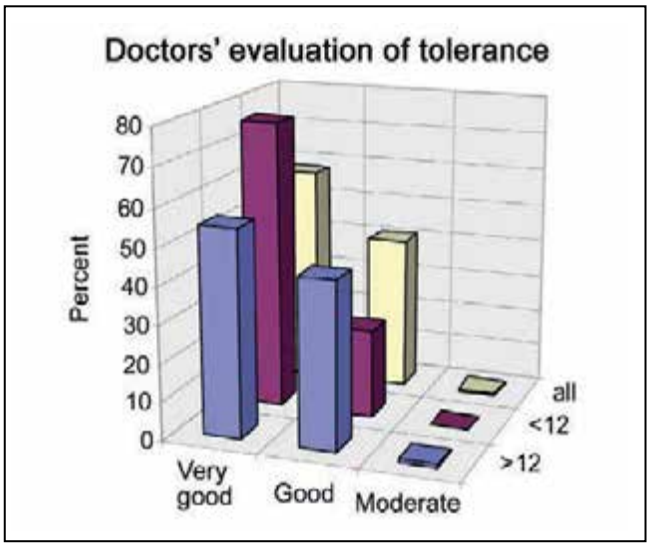
5.3 Side Effects and Discontinuation of the Therapy

No patient discontinued the therapy with SANUKEHL Acne 6X drops, and no adverse drug reactions were reported.

One male patient aged 70 complained of itching 30 minutes after the first embrocation of 5 drops, which disappeared after 10 minutes without any further therapy. The treatment with the test preparation was continued. In the end, patient and doctor gave a "good" tolerance rating.

Evaluation of Tolerance								
Patient group	**Patients' opinion [%]**				**Doctors' opinion [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	60.3	39.0	0.7	0	58.2	41.1	0.7	0
< 12 years	64.7	35.3	0	0	76.5	23.5	0	0
> 12 years	59.0	40.2	0.8	0	54.9	44.3	0.8	0





6. Summary

From August 1992 to April 2000, a total number of 141 patients was admitted to an observation study with the preparation SANUKEHL Acne 6X drops in one internist practice and two general practices. The homeopathic test preparation SANUKEHL Acne consists exclusively of the 6th decimal potency of Propionibacterium acnes.

SANUKEHL Acne 6X, in accordance with Isopathy, was used in a very wide area of application. The preferred application was dependent on the age of the patients. The main areas of application were acne, migraine, venous and cerebral blood circulation disorders as well as arthritis. Accompanying therapies were to be documented in the survey form.

Therapy duration for the children (< 12 years) with 80.3 ± 100.4 days on average was only half as long as that for the adult group with 170.4 ± 149.0 days. A differentiated analysis according to therapy periods offers a clearer picture. Thus, in the under 12-year-olds, the short therapy of up to 75 days was clearly predominant (88.2% of all patients). In the adult group, the largest subgroups were those with more than 150 therapy days and with a therapy duration between 51 and 75 days with 39.3% and 26.2%, respectively.

The drops were taken in by 109 patients and rubbed in by 114 patients. Multiple designations were necessary, because 82 patients took in as well as rubbed in the drops. The dosage recommendations were complied with. The medium dose of oral intake and embrocation in monotherapy was almost twice as high as in combination therapy. 7 adult patients had received a previous therapy with SANUKEHL Acne 6X drops within the last 5 years. However, this group is too small to compare first and multiple users.

Progress of the treatment was determined by means of a collection of medical findings both at the beginning and the conclusion of the therapy.

80.9% of the patients and 82.3% of the doctors rated efficacy as "very good" and "good". In the adult's group, efficacy tended to be rated better; compared with the children's group, there was a

shift from “good” to “very good” in the evaluation. Compliance was judged as “very good” and “good” in 88.6% of all patients participating in the study.

60.3% of the patients and 58.2% of the doctors rated tolerance as “very good”, while 39.0% of the patients and 41.1% of the doctors attested “good” tolerance to SANUKEHL Acne 6X. “Moderate” tolerance was stated in one case each (= 0.8%). “Poor” tolerance was attested to the preparation in no case. One male patient aged 70 complained of itching 30 minutes after the first embrocation of 5 drops, which disappeared after 10 minutes without any further therapy. The treatment with the test preparation was continued. No study was discontinued, and no adverse events occurred. □

First published in the German language in the SANUM-Post magazine (85/2008)

The Relative Importance of the SANUKEHL Remedies within SANUM Therapy

Extending Regulation Therapy by Biological Methods

by Dr. Dr. Peter Schneider

SANUM therapy is a regulation therapy in which natural regulation is supported with remedies in order to cure a disease. Originally developed on the basis of the findings of Professor Enderlein, SANUM therapy is based today on three supporting pillars: the fungal remedies, the bacterial immune modulators and the haptens (see Table 1). The last-named group of remedies in particular has been developed only very recently. Around this therapy structure seven further groups of remedies have been established which are required for the modulation of the three central remedy groups. Because of this great change to and extension of the remedies originally developed by Professor Enderlein, regulation therapy as carried out today using SANUM remedies should no longer be put on a level with Enderlein therapy.

Within SANUM therapy the fungal remedies enable the higher, pathogenic phases of development of the endobiont to be regulated isopathically in Enderlein's meaning of the word into lower, non-pathogenic phases. The bacterial immune modulators are used for specific and non-specific regulation of the immune system. Thus bacillus species have a very strong non-specific stimulating effect on the immune system, whilst mycobacteria and their fragments, as well as having a strong stimulating effect on the T-cell system, also enable specific treatment of tuberculosis.

SANUKEHLs Work like Haptens

The SANUKEHL remedies too, in which the active agents are polysaccharides from the cell walls of micro-organisms, can have both a non-specific and a specific effect on the immune system (see Table 2: SANUKEHL functions). These polysaccharides work like haptens: that is, because their molecules are small they are not in themselves immunologically active, but to have an effect on the immune system they need to bond with a larger molecule, a so-called "carrier", for example a protein.

As can be seen from Table 1, the effects of the three main groups of remedies overlap in many areas. Thus, for example, the fungal remedies also have an immunological function, whilst the haptens have both an immunological and an isopathic component.

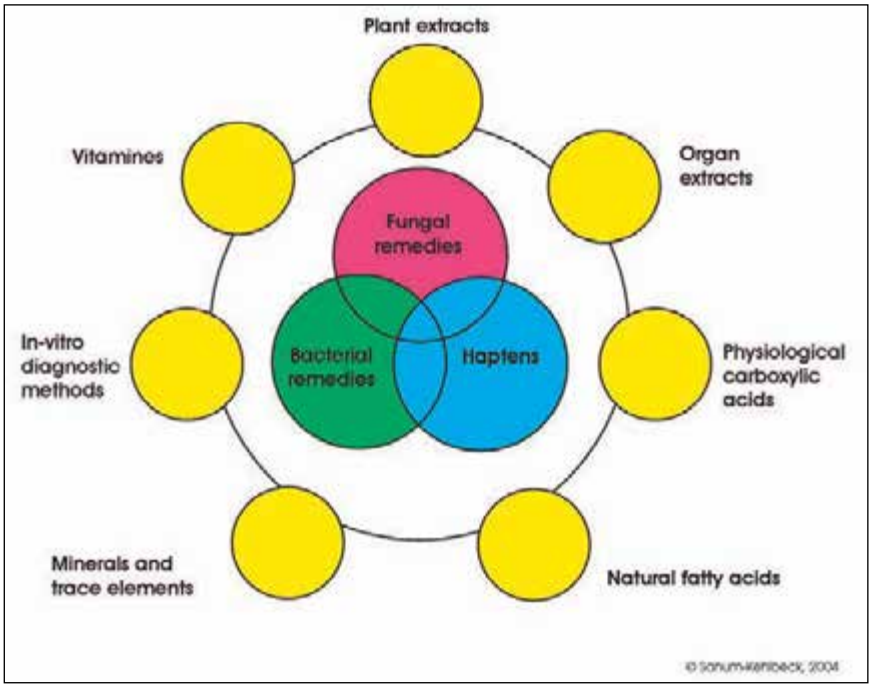


Table 1

•	*Non-specific*:	Stimulation of the immune system.
•	*Specific*:	Obtaining information, bonding of bacteria toxins → formation of antigens → specific and non-specific stimulation of the immune system.

Table 2: Functions of the SANUKEHL preparations

In many illnesses, following elimination of the pathogens, their toxins can still be present and perpetuate the disease. In addition it is possible for the toxins to be the only agent causing the illness. Pathogens form particular polysaccharides as a form of protection against their own toxins (according to Cornelius the so-called antigen absorbers) and these have the task of bonding the pathogen's own toxins or antigens and thus preventing them from becoming active. Furthermore, viruses, bacteria, plants and animals are able to store and pass on biological information with the help of sugar. The code laid down in this language is thus capable of influencing a large number of regulation processes in the host organism.

Haptens Bond Toxins from Bacteria

Bacterial toxins which were released during earlier infections but could not be eliminated from the body because of defective immunogenic characteristics, can be bonded by haptens and then become an antigen. This antigen is capable of stimulating the immune system by activating the T-lymphocytes, which in the end leads to elimination of the bacterial toxins. In a similar manner the prescription of SANUKEHL remedies prepared according to homeopathic methods enables the elimination of the so-called "persistent immune complexes", which have a strong negative effect on the function of the immune system and because of some inability of the immune system cannot be excreted.

The resulting possible fields of application for the SANUKEHL remedies are listed in Table 3 (Opportunities for using SANUKEHL remedies). At the present time thirteen SANUKEHL remedies are available on the German market as drops in the homeopathic 6X potency (see Table 4: SANUKEHL remedies). SANUKEHL COLI is also available as an injection solution in the 7X potency.

The pre-conditions required for the proper function of the SANUKEHL remedies are the ability of the organism to regulate itself and an intact immune system. Therefore before using the SANUKEHLs it is necessary to create these pre-conditions using other SANUM remedies. Here, for example, the important remedies could include the bacterial and plant immune modulators or the fungal remedies with which the intestinal flora can be balanced or congestion removed. In this context CHRYSOCOR can remove metabolic blockades, whilst ALKALA N and SANUVIS can reproduce the acid base equilibrium.

- Specific revitalisation of the microbiological terrain;
- stimulation of the immune system and removal of blockades to reactions (e.g. caused by the so-called "persistent immune complexes");
- hyposensitisation;
- as an intermediary in treatment with nosodes (alleviation of initial aggravation and removal of antigen blockades);
- according to the clinical picture.

Table 3: Opportunities for using SANUKEHL remedies

SANUKEHL	Micro-organism	Nosode
SANUKEHL ACNE	Propionibacterium acnes	Corynebacterium anaerobius
SANUKEHL BRUCEL	Brucella melitensis	Bang
SANUKEHL CAND	Candida albicans	Monilia albicans
SANUKEHL COLI	Escherichia coli	Bac. coli
SANUKEHL KLEBS	Klebsiella pneumoniae	–
SANUKEHL MYC	Mycobacterium bovis	Tuberculinum bovis
SANUKEHL PROT	Proteus vulgaris	Bac. proteus
SANUKEHL PSEU	Pseudomonas aeruginosa	Bac. pyocyaneus
SANUKEHL SALM	Salmonella enteritidis	Bac. gärtner
SANUKEHL SERRA	Serratia marcescens	Enterococcinum
SANUKEHL STAPH	Staphylococcus aureus	Staphylococcus aureus
SANUKEHL STREP	Streptococcus pyogenes	Streptococcinum
SANUKEHL TRICH	Trichophyton verrucosum	Trichophytie

Table 4: SANUKEHL remedies = polysaccharides from micro-organisms (13 preparations)

Broad Spectrum of Therapeutic Application

The therapeutic application of SANUKEHL remedies can be shown by a few examples:

- Specific revitalisation of the microbiological terrain illustrated by SANUKEHL CAND (see Table 5: SANUKEHL CAND);
- Stimulation of the immune system illustrated by basic "arthritis" therapy using SANUKEHL ACNE (see Table 6: SANUKEHL ACNE) and the additional removal of blockades against reactions by SANUKEHL PSEU (see Table 7: SANUKEHL PSEU);
- Application according to the clinical picture illustrated by the use of SANUKEHL PROT for the treatment of infection with Helicobacter pylori (see Table 8: SANUKEHL PROT) and of SANUKEHL BRUCEL for the treatment of borreliosis (see Table 9: SANUKEHL BRUCEL).

SANUKEHL CAND

• De-acidification	Regulation of mineral levels in the body, change of diet: drink 1 teaspoonful of SANUVIS diluted with water twice a day.
• Isopathic therapy	One injection at weekly intervals of FORTAKEHL 5X alternating with PEFRAKEHL 6X and ALBICANSAN 5X.
• Hapten therapy	After two weeks of therapy take 8 drops of SANUKEHL CAND 6X once a day.
• Immune modulation	Once a week take 1 capsule each of LATENSIN 6X (every Wednesday) alternating with RECARCIN 6X (each Sunday).

Table 5: The use of SANUKEHL CAND in cases of candidamycosis (modified from the SANUM prescription book)

SANUKEHL ACNE

Example: Basic therapy for arthritis (treatment according to Dr. Werthmann)

- Diet: without products from cow's milk and hens' eggs (Werthmann);
- Isopathy: FORTAKEHL 5X: 1 tablet twice daily for three weeks; then

  MUCOKEHL 5X: 2 tablets once each morning and

  NIGERSAN 5X: 2 tablets once each evening for a number of months.
- REBAS 4X: 1 capsule twice daily and 1 teaspoonful ALKALA N powder in hot water twice daily.
- SANUKEHL ACNE 6X: 10 to 20 drops twice daily.
- UTILIN 6X: 1 capsule once a week alternating with
- LATENSIN 6X: 1 capsule once a week; also
- Minerals (SELENOKEHL/ZINKOKEHL, Magnesium phosphoricum 6X Glob.).

Table 6

SANUKEHL PSEU

for the stimulation of the immune system and removal of reaction blockades

Use for

- patients undergoing radiation therapy;
- patients undergoing cytostatic therapy;
- patients undergoing long-term immune suppression: that means, in all cases of illness accompanied by leucopenia.

Table 7

SANUKEHL PROT

Example: treatment of Helicobacter pylori infection
(modified treatment plan according to Dr. Rau)

- For de-acidification take ALKALA N powder daily;
- at the same time FORTAKEHL 4X (1 capsule three times daily);
- after two weeks change to 8 drops of SANUKEHL PROT 6X each morning and 1 capsule of FORTAKEHL 4X each evening
- in addition take 1 capsue of RECARCIN 6X every two weeks.

Table 8

SANUKEHL BRUCEL

Example: Borreliosis therapy
(modified treatment plan according to Mr Witt, practioner of natural medicine)

- For de-acidification take ALKALA N powder daily;
- once a week an injection of NOTAKEHL 5X i.v.;
- 8 drops of SANUKEHL BRUCEL daily;
- in addition 1 capsule of LATENSIN each week alternating with RECARCIN and UTILIN “S” (each time begin with the 6X form of the prescription, after a few weeks you may change to 4X).

Table 9

These examples demonstrate that the SANUKEHL remedies are completely integrated into the regulation therapy with SANUM remedies. As in all cases, during the therapy with SANUKEHL remedies the corresponding measures leading to excretion (e.g. excretion via the intestine with OKOUBASAN 2X) should also be taken.

To date no side effects from the SANUKEHL remedies have been reported where these remedies have been used correctly. Because there has not yet been an evaluation of the systematic use of the SANUKEHL remedies in children under the age of 12 years and in pregnant women, the German Federal Office for Drugs and Medical Devices (BfArM) has however decreed that the SANUKEHL remedies should not be used for these groups of patients; therefore the responsibility for their use is left to the prescribers. □

First published in the German language in the SANUM-Post magazine (43/1998)

Statistical Evaluation of an Application Study with Sanukehl Prot 6X Drops

by Dr. Reiner Heidl

1. Introduction

A total number of 118 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1992 and September 2000 in an application study with the preparation SANUKEHL Prot 6X drops. The homeopathic test preparation, SANUKEHL Prot 6X, consists exclusively of Proteus vulgaris e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients who had at least received one dosage of the medicament were included in the study.

2. Participating Patients

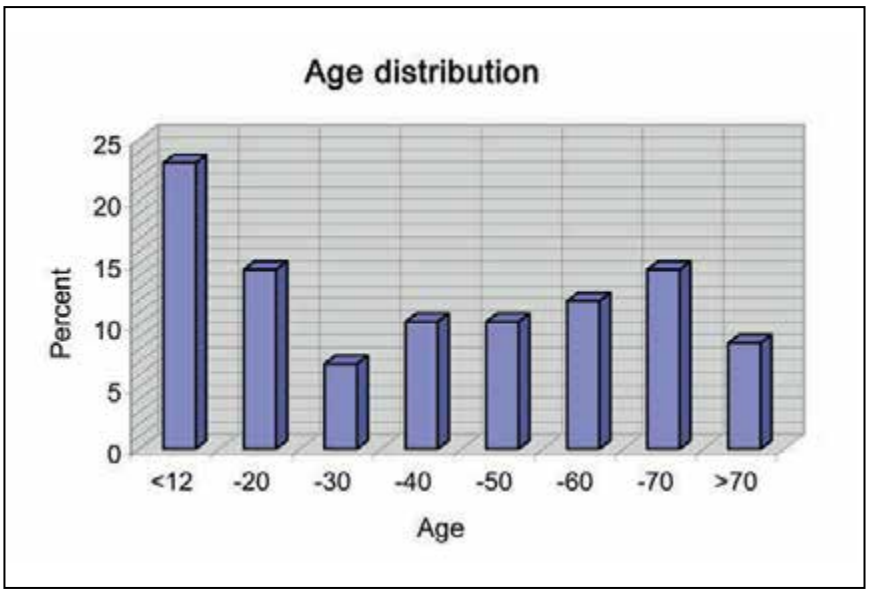
118 patients participated in the study which comprised of 45 males (38.8%) and 71 females (61.2%). No age was given for two patients. The age of the patients varied between 5 and 91 years, with an average age of 37.3 and a standard deviation of 24.1 years. Almost the same number of patients was in the groups between 31 and 40 (10.3%), between 41 and 50 (10.3%) as well as between 13 and 20 (14,5%) and 61 and 70 (14.5%). The largest patient group was that with children under 12 years with 23.1%. In the group between 21 and 30 were 6.8% of the patients and between 51 and 60 12.0% of the patients. Only 8.5% of the patients were over 70 years. Regarding age structure, the males between the age of 43.0 ± 25.0 were on average 9 years older than the females with 33.8 ± 22.8 years.

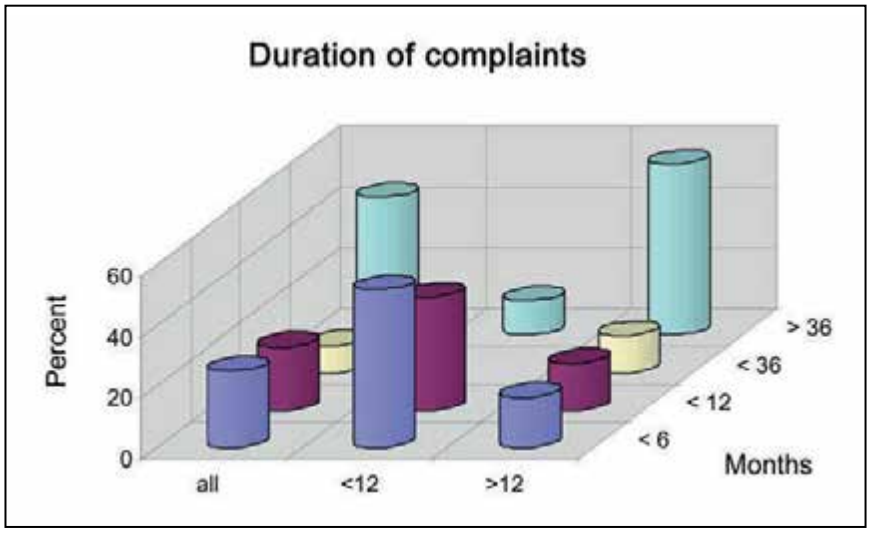
Height varied between 105 and 189 cm with an average height of 154.3 ± 23.0 cm and weight was between 20 and 90 kg with an average weight of 57.3 ± 22.5 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Prot 6X, according to Isopathy, is used in a very wide application range. The main indications were gastroenteritis, disturbed intestinal flora, colitis ulcerosa as well as tonsillitis, cystitis and rheumatic complaints, irrespective of age. A diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol how long they had suffered the disease or complaints. Time frames were given of less than six months, up to one





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< **6**	25.2	51.9	16.7
< **12**	20.7	37.0	15.5
< **36**	9.0	0	11.9
> **36**	45.0	11.1	56.0

year, up to three years and more than three years. Almost half of all patients (45.0%) suffered for more than 36 months. 25.2% of the patients had suffered complaints for less than six months and 20.7% between six and 12 months. Only 9.0% of all patients suffered between one and three years. The existence of the complaints was shifted more in the direction of acute conditions in the patients under 12. 50% of these patients suffered for less than six months, still 37.0% between six and 12 months and only 11.1% for more than 36 months. A period of over 36 months (56%) was especially pronounced in the adult group of patients over 12 years. Only 16.7% of these patients suffered from acute complaints with a duration of up to six months, 15.5% between six and 12 months and 11.9% between 12 and 36 months.

All 118 patients included in the study were treated with SANUKEHL Prot 6X drops for the first time.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

According to the nature of an application study, the physicians were not given a preset time limit for the final patient assessment. The final examinations were conducted after a period of 13 to 370 days, with an average of 98.3 ± 121.8 days.

Amongst the children (< 12 years) the therapy lasted on average 53.9 ± 79.4 days and was approximately 50% shorter compared with the adult group with 111.5 ± 128.9 days. The differentiated evaluation within specific therapy periods allows for a clearer picture. It reveals that amongst the children (< 12 years) the therapy duration up to 75 days was clearly in the foreground (81.5% of all patients). Amongst the adults, the largest groups were those with more than 150 therapy days (24.2%) but also 29.7% with less than 25 therapy days.

3.2 Dosage

The dosage was set as follows, according to the patient information leaflet:

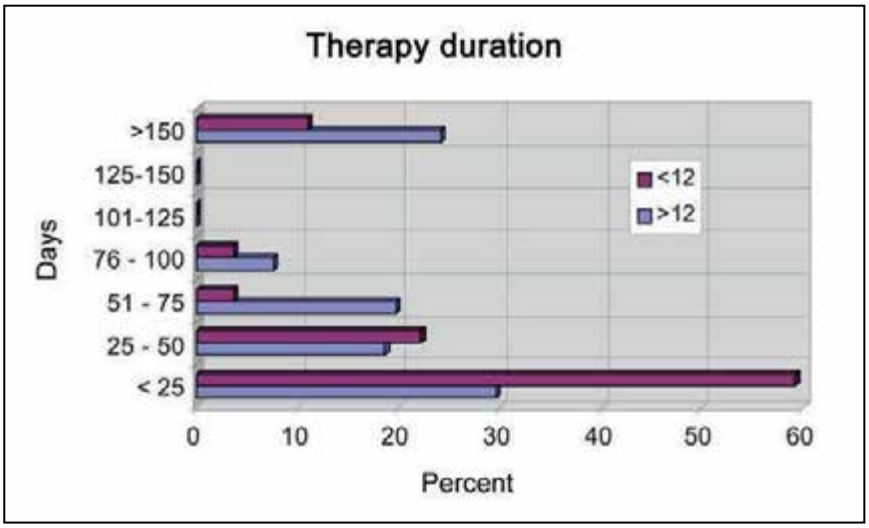
Oral application: for acute conditions: 5–10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day.

External application: Every 1–2 days, 5–10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

115 patients took the drops orally and 36 patients were treated externally. Multiple counts were necessary, as 34 patients were treated orally and in addition externally.

The following table shows the medium dosage of the application forms. The drops are related to the daily oral intake or external application respectively.

The recommended dosage was taken. In the group under 12 years, the drops for oral application were dosed according to age. The external application was almost the same in the children and adult group. The medium dose in monotherapy was approximately 20% higher than that in the combination therapy. With regard to the range of scatter, the



dosage of the external application was the same in monotherapy and combination therapy.

4. Efficacy and Tolerance

4.1 Evaluation of Efficacy by Doctor and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 27.1% of the patients assessed efficacy with "very good", 61.9% with "good", whilst 11.0% assessed the efficacy with "moderate". The results of the physicians' evaluation for efficacy were similarly positive as that of the patients. In 28.0% of the cases physicians assessed efficacy with "very good", 54.2% with "good" and 17.8% with "moderate". Neither patient nor physician assessed "no effect". The evaluation by physicians and patients alike was, according to tendency, better in the children's group than in the adult's group, as there were fewer evaluations with "very good" but 25% more evaluations with "good" and in total 50% less evaluations with "moderate".

Compliance (N = 116) was assessed by the physicians to be "very good" for 32 patients and "good" for 60 patients, hence 78% of all patients participating in the study were given

Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	16.5 ± 5.9	5	40
Drops (topical)	5.1 ± 1.4	3	10

All Patients under 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	10.4 ± 3.8	5	20
Drops (topical)	4.7 ± 0.7	3	5

All Patients over 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	18.3 ± 5.0	5	40
Drops (topical)	5.3 ± 1.5	3	10

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	17.4 ± 5.9	5	40	Mono
Drops (oral)	14.2 ± 5.1	8	20	Combi
Drops (topical)	6.0 ± 0	6	6	Mono
Drops (topical)	5.1 ± 1.4	3	10	Combi

a “good“ or “very good“ compliance rating. 24 patients were given a “moderate” and no patient a “non-compliant” rating.

4.2 Evaluation of Tolerance by Doctor and Patient

At the conclusion of the study, an evaluation of tolerance was submitted by the physicians and patients, whereby an assessment of “very good”, “good”, “moderate“ and “poor“ could be chosen. 38.1% of patients and 32.2% of physicians rated tolerance to be “very good”, whilst 58.5% of patients and 66.1% of physicians gave SANUKEHL Prot 6X a “good” tolerance rating. Only four patients of the adult group rated with “moderate”. The physicians rated in two cases with “moderate“ and neither patient nor physician rated with “poor“.

In the adult’s group over 12 years, patients and physicians rated tolerance with “very good” and “good” better than that of the age group under 12 years. In the adult group, the evaluation shifted from “very good” to “good”.

4.3 Side Effects and Discontinuation of the Therapy

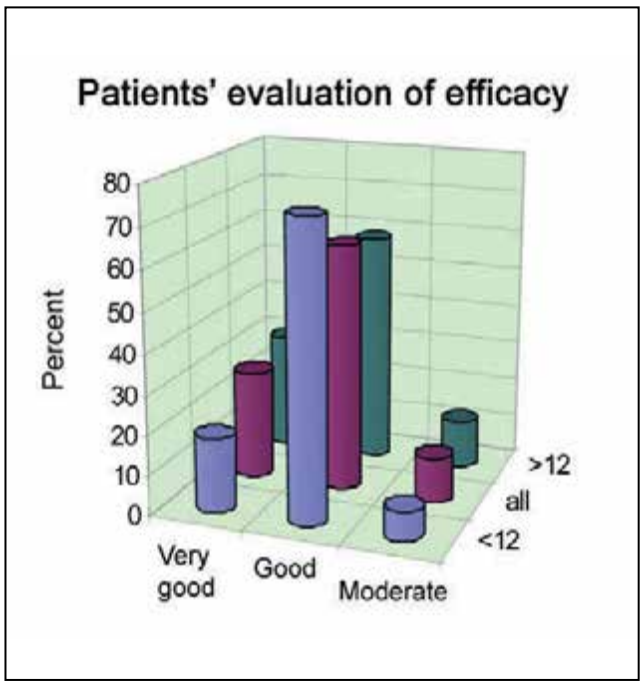
No therapy with SANUKEHL Prot 6X was discontinued and no side effects were reported.

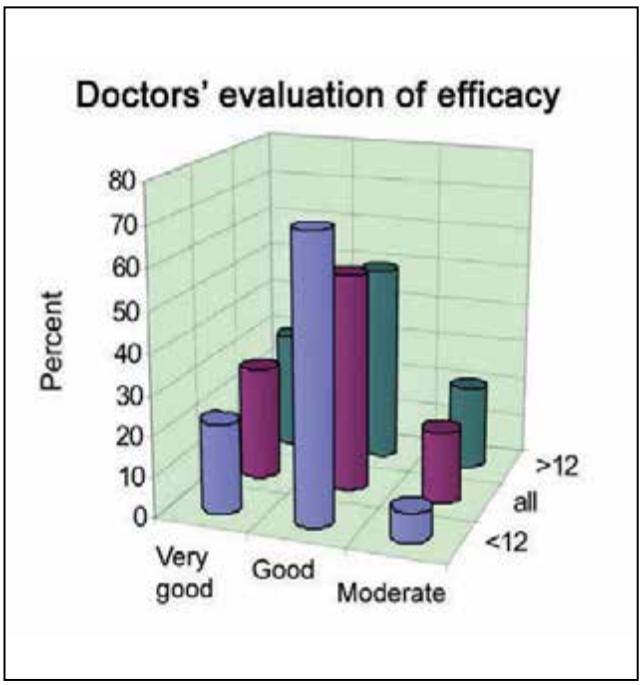
5. Summary

A total number of 118 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1992 and September 2000 in an application study with the preparation SANUKEHL Prot 6X drops. The homeopathic test preparation, SANUKEHL Prot 6X, consists exclusively of Proteus vulgaris e volumine cellulae in the 6th decimal potency.

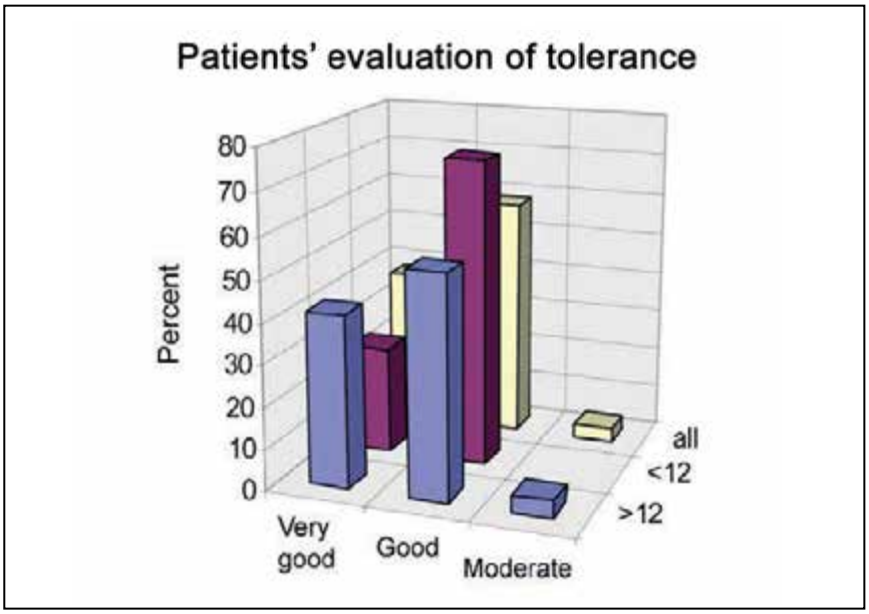
SANUKEHL Prot 6X was used in a very broad application range in accordance with Isopathy, irrespective of the patients’ age. The main indications were gastroenteritis, disturbed intestinal flora, colitis ulcerosa as well as tonsillitis, cystitis and rheumatic complaints. Accompanying therapies were to be documented in the evaluation form.

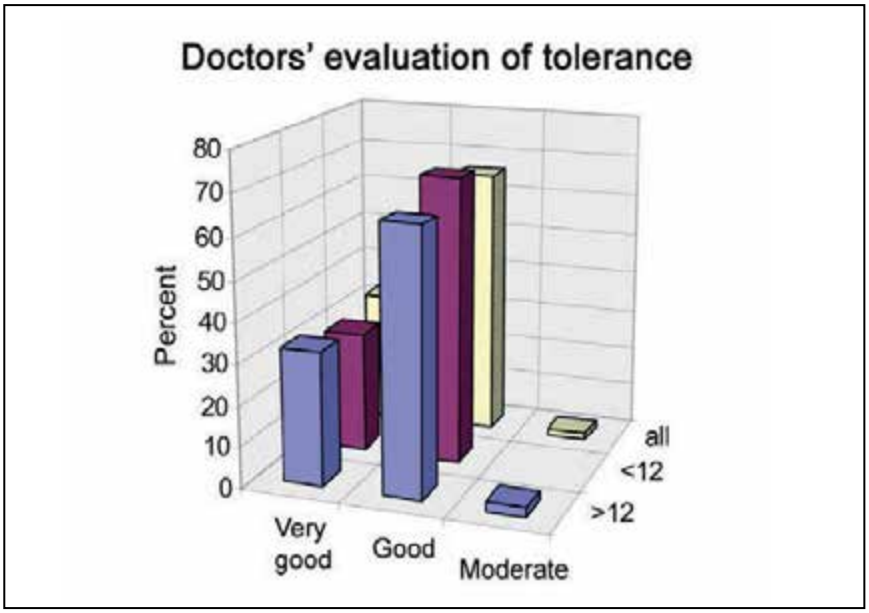
Evaluation of Efficacy								
Patient group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	27.1	61.9	11.0	0	28.0	54.2	17.8	0
< 12 years	18.5	74.1	7.4	0	22.2	70.4	7.4	0
> 12 years	29.7	58.2	12.1	0	29.7	49.5	20.9	0





Evaluation of Tolerance								
Patient group	**Patients' evaluation [%]**				**Doctors' evaluation [%]**			
	Very Good	Good	Moderate	Poor	Very Good	Good	Moderate	Poor
All patients	38.1	58.5	3.4	0	32.2	66.1	1.7	0
< 12 Years	25.9	74.1	0	0	29.6	70.4	0	0
> 12 Years	41.8	53.8	4.4	0	33.0	64.8	2.2	0





Amongst the children (< 12 years) the therapy lasted on average 53.9 ± 79.4 days and was approximately 50% shorter compared with the adult group with 111.5 ± 128.9 days. The differentiated evaluation within specific therapy periods allows for a clearer picture. It reveals that amongst the children (< 12 years) the therapy duration up to 75 days was clearly in the foreground (81.5% of all patients). Amongst the adults, the largest groups were those with more than 150 therapy days (24.2%) and up to 25 days (29.7%) of these patients.

115 patients took the drops orally and 36 patients were treated externally. Multiple counts were necessary, as 34 patients were treated orally and in addition externally. The recommended dosage was taken. The medium dose in monotherapy was 20% higher than that in the combination therapy. With regard to the range of scatter, the dosage of the external application was the same in monotherapy and combination therapy. All patients included in the study were treated with SANUKEHL Prot 6X drops for the first time.

The therapeutic progress was determined by evaluations conducted at the beginning and the end of the therapy. 89% of the patients and 82.2% of the physicians rated the efficacy of the therapy with "very good" and "good". The evaluation by physician and patient was, according to tendency, better in the children's than in the adult's group, as there were fewer evaluations with "very good " but 25% more evaluations with "good" and in total 50% less evaluations with "moderate". For 78% of all patients participating

in the study, compliance was certified to be “good“ or “very good“.

38.1% of patients and 32.2% of physicians rated tolerance to be “very good”, whilst 58.5% of patients and 66.1% of physicians gave SANUKEHL Prot 6X drops a “good” tolerance rating. Only four patients of the adult group rated with “moderate” and the physicians rated two cases with “moderate“. Neither patient nor physician rated with “poor“

No therapy with SANUKEHL Prot 6X was discontinued and no side effects were reported. □

First published in the German language in the SANUM-Post magazine (89/2009)

Therapy with Good Prospects using SANUKEHLs

A Broad Spectrum of Effects from Hapten Remedies

by Dr. Konrad Werthmann, Austria

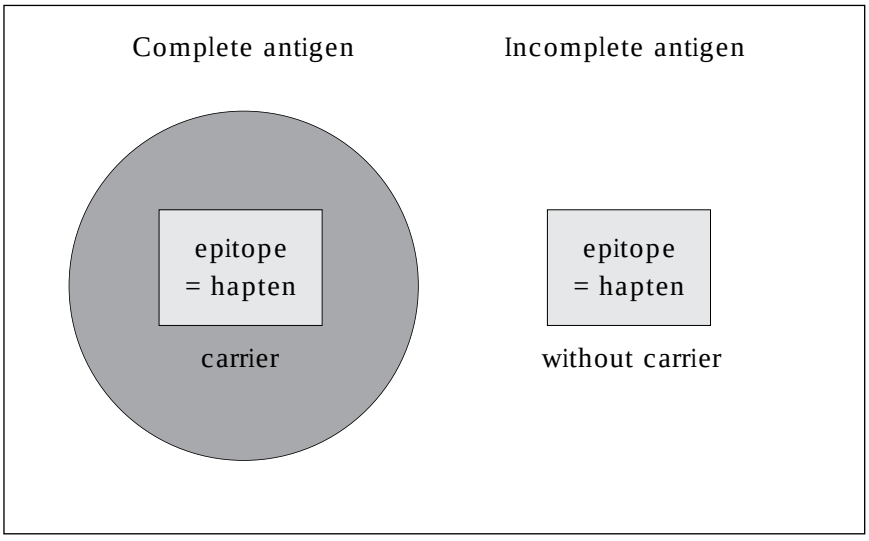
The greatest problem of the human body is sufficient excretion of a wide variety of incorporated waste materials. In part people themselves are responsible (drinking too little, undergoing dental root treatment, errors in diet, cosmetics, antibiotics), but partly the reason is that the products are fixed in the connective tissue and are difficult to release. The toxins and products of the metabolism are deposited in the matrix or are subject to attempts to excrete.

The organism has different ways of disposing of waste, from the bonding of endobionts with proteins or the formation of antibodies to attempts to excrete haptens. Sometimes the paths taken by Nature are "on the wrong track", as with haptens. And yet this bodily process points the way to particularly effective remedies, the SANUKEHLs. These work only to dispose of waste materials which are fixed in the matrix or inside cells. In so doing they intervene deeply in the immunological process and thus increase the amount of work done by the immune organs involved.

What are Haptens?

In immunology there are two types of antigen structures, complete antigens and incomplete antigens or haptens. They are differentiated by the fact that complete antigens have a protein carrier and haptens do not. In immunological terms the carrier antigen is unimportant. However, antigens without protein carriers are disposed of according to other criteria (Illus. 1).

In complete antigens the part with the greatest antigenicity is the epitope (or hapten). This part attracts all anti-allergic reactions which cause the antigen to bond. This bonding reaction is the well-known antigen antibody reaction which is responsible for the production of antibodies. For example, typical antibodies are CrP (C-reactive protein) or ASLO (ASR = antistreptolysin titre).



Illus. 1

Antigens without a carrier protein are called haptens. This carrier protein means that the bare antigen part which attracts all allergic reactions can no longer be bonded in accordance with the reactions which are normal in the organism. In order to achieve immunologically acceptable elimination, the organism helps itself by trying the defensive model which it first knew in evolution. This is the model of inflammation, in clinical terms a chronic inflammation. This inflammation appears naturally, according to the individual, partly in the relevant weak organ and partly on organs bonded to meridians or zones of projection. Such inflammation can of course be suppressed for the time being by the use of antibiotics, but it will recur.

The list of materials which have the character of haptens is large and incomplete (Illus.2). This list can be extended in any way you like. The important pointers are bacteria, fungal infections, medications and cosmetics. Above all the "modern" trend for piercing creates new possibilities of chronic infections caused by metals with hapten characteristics.

Haptens have one feature which, if used in a targeted manner, brings great advantages to medicine. They

are attacked by the body by means of cellular reactions and this requires immunologically effective neurotransmitters. These must produce or trigger different types of cytokines. There is a deficiency of the relevant cytokines with immune function in all chronic diseases.

Cytokines are highly active polypeptides and glycoproteins which play a considerable part in transmitting signals between cells and in regulation of the rate of proliferation. The cells which produce cytokines have a broad, often overlapping spectrum of functions. Certain therapies work by suppressing the immune system or chronically recurring diseases, which are distinguished by a lack of lectins. For these circumstances it is important to use remedies which intervene in the immune system as deeply as haptens and can balance out the lack of lectins. Both the therapist and the patient can heave a sigh of relief.

The SANUKEHLs are remedies which have the characteristics of haptens but come from special pathogens and are subject to a specialised production process. They are a good supplement and overall a good help in the groups of diseases listed.

The correctness of these facts found empirically in practice is being confirmed by a comprehensive test by the laboratory of Prof. Dr Kunz in Leipzig. Because the SANUKEHL PSEU is used in a wide variety of situations, this remedy was taken as the basis of the study. This shows that the granulocytes and macrophages as target cells respond and so increase in number during phagocytosis. At the same time the TNF (tumour necrosis factor), GM-CSF (granulocyte/macrophage colony stimulating factor), IL (interleukins) and IF (interferons) are formed in larger quantities. Within the framework of this investigation some special features of SANUKEHLs are being discovered which do not only simplify their use but above all possess an increased therapeutic value.

The dosage of therapeutic haptens does not have to be large. Conventional opinion says “The more the better“. Not in this case. The effect of therapeutic haptens is increased by homeopathic dilutions. This can be proven. At the level of nanograms, i.e. 8X, it is still possible to prove a considerable increase in the production of lectins. Therefore it is not surprising that the author recommends again and again that in addition to the remedy being taken orally it should also be rubbed into the skin sparingly with a powerful effect. This is the completion of the effect by other immune paths.

The increase by 100% in the effect of therapeutic haptens is achieved when immune bodies are present at the same time. The immune bodies consist of antigens and antibodies.

Antigens which tend to cause cellular immunity

Defence against infection:

Bacteria: mycobacteria (tuberculosis), Salmonella typhi, listerioses

Fungi: Candida albicans, Histoplasma

Protozoa: toxoplasmosis

Viruses: mumps, measles, rubella, herpes.

Allergies of the latent type:

Infection antigens which cause cellular immunity.

Eczematogenic substances: metals, plastics, chemicals, cosmetics, medication

Transplant rejection

Autoimmunity:

Thyroid, testicles, brain.

Monitoring of tumours

Illus. 2

The immune bodies can only be formed when sufficient amounts of IgA are present. This requires an intact intestinal mucous membrane and a healthy cell milieu in the bowel. The immune complexes lead once again to further stimulation of monocytes and B-lymphocytes.

One important target of therapeutic haptens is the T3/T4 lymphocytes which give rise to an improvement in the ratio, above all in the activated ratio. For this one requires completely intact Peyer's patches, which can only be produced if the intestinal mucous membrane is intact.

At the same time the B-lymphocytes and natural killer cells are stimulated. The former, being plasma cells, have to recognise allergens, and normal bowel conditions are also required for this.

The Cell Milieu System of the Bowel and Mucosa enteralis

The cell milieu system (Pischinger) is perhaps better known today as the enteral matrix and is a complex structure. Mostly only the bacterial part is treated and the important Mucosa enteralis is forgotten. The Mucosa enteralis creates the important Immunoglobulin A (IgA), which seals the intestinal mucous membrane and thus allows no toxin, bacteria or irritant haptens (Illus. 3) to pass into the body. This IgA prevents degranulation of the mast cells and thus gives protection against three problematic groups of diseases: colitis, bronchial asthma and neurodermatitis. The intact Mucosa enteralis is the foothold of bacteria. It first enables intact working of the Peyer's patches as the place where the T3/T4 lymphocytes form, which in turn stimulate the macrophages and granulocytes to phagocytosis. Thus the enteral matrix is a complex area of activity [1,2]

Haptens

1. A part of the macromolecule which works as an antigen;
2. a part of the antigen which because it is small cannot trigger an immune response;
3. trigger only cellular reactions.

Illus. 3

which must be taken into account in every course of treatment. A hypoallergenic diet as recommended by Werthmann (without products from cow's milk or hens' eggs) which is strictly continued for a long period of time helps the Mucosa enteralis and thus the cell milieu system to function as a defensive organ again.

The result: In any case, effective therapy depends on a healthy intestinal mucous membrane. SANUKEHLs are never prescribed as monotherapy, a course of microbiological treatment must be used as the foundation!

How are SANUKEHLs used?

1. *Note the symptoms of the SANUKEHLs derived from the strain of pathogens.*

This can be easily explained using SANUKEHL BRUCEL as an example: This remedy is derived from the polysaccharide components on the surface of Brucella melitensis. Fevers which are acutely intense but last only limited time or undulate can point to brucellosis infections.

2. *Note the possibilities for transmission of infections.*

Nowadays hardly occurring, but in the past people who dealt with raw meat and milk were particularly at risk (e.g. housewives, steak eaters, butchers). This also applied to people who drank untreated milk and enjoyed raw lamb or goat's meat and cheese.[3] Nowadays the dangers are banned as far as possible.

3. *Particular therapeutic qualities*

SANUKEHL PSEU has particular – or rather, specifically therapeutic – qualities which make it a genuine and valuable remedy in degenerative diseases. Above all it raises the

SANUKEHL BRUCEL for

- malaria;
- headaches;
- pains in joints and muscles;
- recurring diseases of the bones;
- diseases of the spine;
- diseases of the gall bladder;
- lovers of steak, untreated milk, goat's meat and lamb.

Illus. 4

tumour necrosis factor (TNF) and the granulocyte/macrophage colony stimulating factor (GM-CSF). This means that SANUKEHL PSEU is prescribed in cases of tumours of all geneses, agranulocytosis and aplastic anaemia, chemo- and radiotherapy, but also where the patient is susceptible to infections. The stimulus on the bone marrow (GM-CSF) will work more effectively and quickly if the intestinal mucous membrane is healthy.

4. *Active agents with special power as in SANUKEHL ACNE*

This SANUKEHL contains a Propionibacterium hapten which has a strong immunological component and an excellent vascular component. Of course one can also use it to treat acne, but the Propionibacterium is a strong, immunologically effective substance beside Bacillus subtilis. The distinct vascular component is one reason why the author frequently uses it in cases of recurring circulatory disorders and memory problems.

The following prescription has proved its worth in the problems listed above:

Take MUCOKEHL 5X tablets:
1 x 1 each morning (Monday – Friday);
NIGERSAN 5X tablets: 1 x 1 each evening (Monday – Friday)
MUCOKEHL Atox 6X drops
and
NIGERSAN Atox 6X drops: 1 x 5 drops (Saturday and Sunday) of each;
Propionibacterium avidum 5X capsules: 3 x 1 per week;
SANUKEHL ACNE 6X drops: 3 x per week rub in 5 drops in the area of the heart and take 5 drops internally.

5. *Groups with the same conditions for infection; SANUKEHL SERRA belongs here*

The germ Serratia marcascens is a harmless pathogen in the normal environment. In hospitals and old people's homes it is feared as a negative germ. Its strengths are the so-called nosocomial infections. As soon as people with weak immune systems visit such wards they can fall ill with an initially "banal" 'flu because they are negative people. These people take over the germs which in themselves are harmless and offer them potential opportunities for growth. The illness drags on, whilst phases of improvement interrupt the fever. The body's defence ability has already long been reduced by a disorder or by an atrophic Mucosa enteralis. When SANUKEHL SERRA is brought into use, it will require additional regenerative therapy with FORTAKEHL and REBAS for the intestinal mucous membrane and the Peyer's patches to be carried out at the same time.

The author likes to prescribe SANUKEHL SERRA as "protection against 'flu".

Take QUENTAKEHL and NOTAKEHL on alternate days, 2x10 drops;
SANUKEHL SERRA 6X drops: daily 2 x 5 drops by mouth, 1x5 drops rubbed in; as a supplement:
Werthmann's diet for a few weeks.

6. *As an intermediate remedy in therapy with the corresponding nosode for the relief of initial aggravation*

This procedure appeals particularly to homeopaths who use single

SANUKEHL PSEU for

GM-CSF:
- high-dose chemotherapy;
- radiation therapy;
- carcinomas in general;
- leukaemia, agranulocytosis;
- thrombocytopenia (Schönlein-Henoch);
- blood clotting disorders;
- susceptibility to infections (because of disorder of immune system).

TNF:
- cytolysis/cytostasis of tumour cells;
- proliferation of T- / B-cells;
- susceptibility to infections: bowel, ears, airways, liver.

Illus. 5

SANUKEHL ACNE
is effective in
- circulatory disorders ;
- headache, migraine;
- disorders of recall and memory;
- chronic coronary problems;
- chronic infections;
- rheumatoid arthritis;
- acne conglobata.

Illus. 6

remedies. If the correct key nosode or the correct homeopathic remedy is found but is prescribed in to low a potency, too many toxins can be released and put a strain on the organism, mostly only on the weak organ. The pains caused by this are relieved by interposing the corresponding SANUKEHLs. In a procedure like this pre-treatment with the appropriate SANUKEHL seems to be even better.

Other Important SANUKEHLs

SANUKEHL CAND: Like all remedies of this type it is produced from the polysaccharides of Candida albicans. Candidiasis is not only very common, it is also a condition which is "feared". We must not forget that the Candida germ is also a friend and helper of the organism in the removal of heavy metals (amalgam, dental root treatment). In chronic, particularly recurring cases, as well as prescribing SANUKEHL CAND, one should also look for a solution to the problems of heavy metals.

In cases of genital mycosis ALBICANSAN will be prescribed orally in drop form and also applied intravaginally (10 drops each evening). SANUKEHL CAND is rubbed in on the inner side of the upper thigh and 1 x 5 drops prescribed, to be taken orally. If this does not combat the recurrent candidiasis, than an attempt should be made using SANUKEHL TRICH.

SANUKEHL TRICH contains the polysaccharide components (haptens) of the pathogen Tricophyton verrucosum and is specially intended for mycoses of the hair and nails. This nail mycosis is a disease for which the treatment is long and drawn out, in which over a period of months diet can also bring an extremely good healing tendency. It is recommended that a few drops be dripped between the nail and infected areas of skin and left to take effect in that area. At the beginning a course of EXMYKEHL with 1 suppository twice daily is recommended as a supplement. Only afterwards should the usual building up of symbiosis with FORTAKEHL, MUCOKEHL/NIGERSAN be carried out.

SANUKEHL CAND is effective

- in every form of fungal infection;
- in cases of genital mycosis;
- in cases of inter-digital mycosis;
- in cases of asthma and allergies;
- in the mouth: stomatitis, gingivitis, candidiasis, aphthae;
- as a form of interval treatment in cases of colitis syndrome.

Illus. 7

Colitis syndrome in all grades of severity is repeatedly triggered off by allergic reactions and consecutive malcolonisations. It is therefore imperative to excrete any pathogenic toxins found in the bowel as well. Beside following Werthmann's diet, following SANUKEHLs are indispensable.

SANUKEHL PROT: The Proteus germ which is found in the bowel is inconspicuous and harmless. It is the most important aerobic decomposer of protein and is present in all products of decomposition (foods). However, as soon as dysbiosis occurs and the strength and number of other bowel populations is weakened, Proteus fills the gap. Excess is a strain, and diarrhoea and/or constipation are the consequences. When the barrier of the bowel is penetrated, even weak organs which are some distance away can become diseased. Always consider Proteus in diseases which occur after a holiday in countries with less hygienic practices or after consumption of foods which are beyond their best.

SANUKEHL COLI; The Escherichia Coli germ is a major germ in the breakdown of sugars and in immunology. In every type of enteritis, in every fungal colonisation of the bowel and in every build-up of

SANUKEHL PROT is effective in

- gastroenteritis;
- peritonitis;
- dysbiosis after taking antibiotics;
- cystopyelitis;
- puerperal sepsis;
- otitis, peptic or duodenal ulcers;
- conditions after "food poisoning";
- haematemesis, Menière's disease;
- colitis syndrome.

Illus. 8

SANUKEHL COLI is effective in

- colitis syndrome;
- cholangitis;
- cholecystitis;
- cystitis;
- cystopyelitis;
- infections of the urinary tract;
- metritis;
- prostatitis;
- epididymitis.

Illus. 9

symbiosis E. Coli must be considered. It is a major germ in infections of the urinary tract.

After all, Pergler, an Austrian practitioner, proves in a study of over 1200 persons that five per cent of all people have no Coli population and therefore have a particularly weak immune system. Here you can treat people with the combination of SANUKEHL COLI and CAND or COLI and PROT, for these have a pronounced effect on mycosis of the bowel.

The prescription is:

- EXMYKEHL 3X suppositories (twice daily for one or two weeks);
- FORTAKEHL 5X tablets (1 tablet twice daily Monday - Friday for two weeks);
- EXMYKEHL 3X suppositories (1 suppository once daily on Saturday and Sunday for two weeks);
- SANUKEHL CAND 6X drops and SANUKEHL COLI 6X drops (10 drops twice daily, taken alternately);
- MUCOKEHL 5X tablets (1 tablet once each morning, Mon – Fri);
- NIGERSAN 5X tablets (1 tablet once each evening, Mon – Fri);
- EXMYKEHL 3X suppositories (1 suppository once on Saturday);
- SANUKEHL CAND 6X drops and SANUKEHL COLI 6X drops (10 drops twice daily, taken alternately).

SANUKEHL SALM, of course, also belongs to this series; it has the same list of indications as both the previous SANUKEHLs.

Susceptibility to infections (mostly as a consequence of mycosis of the bowel) can also be treated with the prescription given above. This is seen in recurrent middle ear infections, bronchitis, sore throats (alternating with diarrhoea or constipation).

With children it is better to use the following scheme and to interpolate SANUKEHL PSEU 6X drops for a period:

1. Begin with PEFRAKEHL 5X (5-10 drops twice daily, Mon - Fri);
   on Sat/Sun FORTAKEHL 5X (1-10 drops twice daily for two to three weeks);
2. SANKOMBI 5X drops (10-15 drops twice daily Mon - Fri);
   on Sat/Sun PEFRAKEHL 5X drops for a number of weeks.
3. From the beginning, on alternate days,
   SANUKEHL PSEU 6X drops and
   SANUKEHL COLI 6X drops (rub in [!] 2-5 drops twice daily)

Children younger than 12 years should basically not be treated with SANUKEHLs.

Chronicity or Tuberculinic Weakness

Patients suffering from tuberculinic weakness or simply from a weakness of Aspergillus niger and point again and again to chronic illness in their medical history, require SANUKEHL KLEBS and SANUKEHL MYC.

SANUKEHL KLEBS contains the polysaccharide elements of Klebsiella pneumoniae and can therefore not only be used in diseases of the lungs but also in bowel disorders. Accordingly the indications range from asthma and pneumonia to damage caused by antibiotics in the milieu of the bowel. The lung is definitely an Aspergillus organ, so that you must always think of tuberculinic weakness. It has proved useful to try a combination with SANUKEHL MYC.

SANUKEHL KLEBS is effective in cases of

- bronchiectases;
- diseases of the airways;
- pneumonia;
- pleurisy;
- influenza;
- damage caused by treatment with antibiotics;
- silicosis.

Illus. 10

SANUKEHL MYC, made from Mycobacterium bovis, is used in all chronic diseases. Accordingly the area of indications is long and comprehensive. SANUKEHL MYC demonstrates a clear pointer to the connections between the bowel and chronic illnesses. It is produced from the tuberculinic bacillus from cattle. Tuberculinic weakness is triggered in many people by cattle. Therefore SANUKEHL MYC should be considered not only in cases of tuberculosis but above all in all diseases of the bowel.

Suggested therapy in cases of tuberculinic weakness / chronic diseases:

1. EXMYKEHL 3X suppositories (1 suppository twice daily Mon – Fri for two weeks; on Sat / Sun FORTAKEHL 5X tablets (1 tablet twice daily);
2. MUCOKEHL 5X tablets (1 tablet once in the morning) and NIGERSAN 5X tablets (1 tablet once in the evening, Fri – Sun);
   FORTAKEHL 5X tablets (2 x 1 tablet for weeks or months).
3. From the beginning of the second week, alternating daily SANUKEHL MYC and
   SANUKEHL Klebs (5 drops twice daily; once each day rub in 5 drops).
4. From the third week onwards UTILIN "S" 6X drops can also be interpolated (5 drops twice daily on Sat / Sun).

Here too it is pointed out that the chronic patient and the tuberculinic type suffer from a chronically diseased bowel (a strict long-term diet is essential) and from other broader disorders (teeth, tonsils, scars).

SANUKEHL MYC is effective in

- all chronic diseases;
- hordeolum (styes);
- hydrocele;
- juvenile acne;
- diseases of the airways;
- bowel diseases;
- disorders of the liver and gall bladder;
- psoriasis;
- lupus erythematodes;
- urinary tract infections.

Illus. 11

SANUKEHL STAPH and ***STREP***: Here we must bear in mind that the organism tries to excrete toxins via the inflammation or (according to Reckeweg) via the reaction phase. This is a typical defence mechanism of haptens. Here the SANUKEHLs can achieve a certain improvement in excretion by triggering the immune bodies. However patience is required. Always check blocking disorders such as teeth (dental root treatment, cysts, "forgotten" remains of roots, amalgam), tonsils and scars.

Tonsillitis, otitis

1. NOTAKEHL 5X drops (10 drops twice daily Mon - Fri);
   on Sat / Sun QUENTAKEHL 5X (10 drops twice each day for 2 – 3 weeks);
2. SANKOMBI 5X drops (10 drops twice daily Mon - Fri);
   on Sat / Sun NOTAKEHL 5X drops for a number of weeks;
3. From the start SANUKEHL STREP (rub in 2 x 5 drops behind the ears or on the side of the neck).
4. Without further ado use SANUKEHL PSEU on alternate days.

SANUKEHL STREP
is effective in cases of

- alopecia;
- angina tonsillaris;
- myocarditis, endocarditis;
- phlegmon;
- puerperal sepsis;
- otitis media purulenta;
- primary chronic polyarthritis.

SANUKEHL STAPH
is effective in cases of

- folliculitis;
- furunculosis;
- blepharitis;
- hordeolum;
- otitis;
- sinusitis;
- meningitis;
- mastoiditis;
- osteomyelitis;
- urogenital infections.

Illus. 12

Urinary tract infections caused by staphylococci

1. NOTAKEHL 5X tablets (1 tablet twice daily); changing after two weeks to
2. MUCOKEHL 5X tablets (1 tablet once each morning) and NIGER-SAN 5X tablets (1 tablet once each evening Mon - Fri with interpolation of NOTAKEHL on Sat / Sun for a period of weeks).
3. From the start SANUKEHL STAPH alternating daily with SANUKEHL COLI (5 drops taken orally twice daily).

After a few weeks you must possibly change the prescribed SANUKEHLs for SANUKEHL MYC.

Summary

You must differentiate between those remedies which are stored in the body as haptens and those remedies which have a particularly deep-reaching effect on the immune system through particular processes because of their hapten characteristics. They are capable of activating stored bacterium particles of this sort from the connective tissues or from the inside of cells by means of different cytokines (in particular TNF, GM-CSF and interleukins) and to cleanse them using different organs of excretion. You should always be aware that such radical remedies can only trigger an immunological cascade when the corresponding organs in the intestinal mucous membrane are intact. In general a course of therapy can only be as good as the way in which the bowel can react to it. Therefore the intestinal mucous membrane must be cured by means of a diet without hens' eggs and cow's milk (Werthmann), and the carpet of bacteria must be cured using cyclogenically active microbiological SANUM remedies.

The SANUKEHLs have different starting points in their approach to therapy and can therefore be used much more widely than the single product name would lead one to think. Their is even still evidence of their effectiveness in the smallest doses measured in nanograms (8X) and therefore you can also prescribe them to be rubbed into the skin without having to think about it. □

Relationship between haptens and meridians	
lymph	SANUKEHL PSEU, SERRA, KLEBS, STREP
heart	SANUKEHL SERRA, ACNE, STREP
lung	SANUKEHL SERRA, KLEBS, COLI, SALM, BRUCEL
large intestine	SANUKEHL COLI, PROT, SALM, BRUCEL, CAND
allergy	SANUKEHL COLI, SALM, ACNE, CAND, STREP
small intestine	SANUKEHL COLI, CAND, PSEU, SALM, BRUCEL
liver	SANUKEHL COLI, ACNE, PSEU, SALM, STAPH, CAND
spleen / pancreas	SANUKEHL ACNE, SERRA, PSEU, COLI, SALM, CAND (PROT)
gall bladder	SANUKEHL COLI, SALM, PROT
stomach	SANUKEHL PSEU, SALM, PROT, COLI

Illus. 13: there is a relationship between haptens and meridians

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First published in the German language in the SANUM-Post magazine (48/1999)

Relationship between diseases and haptens		
General	Chronic disease	SANUKEHL
Tuberculinic weakness	Para-TB, TB	MYC, PSEU, BRUCEL (malaria)
Chronic bowel disorder	Colitis, dysbiotic constipation (worms)	PROT, COLI, SALM, CAND
Rheumatic attacks	PCP, myalgia	PSEU, STREP, SALM, MYC, BRUCEL
Fungal infections		CAND, TRICH, PSEU
Circulation	Post-infarction status, ulcus cruris, phlebitis, peripheral disorders of the circulation	ACNE, PSEU, PROT

Illus. 14: haptens can be classed according to the general concepts of disease

Statistical Evaluation of an Application Study with Sanukehl Klebs 6X Drops

by Dr. Reiner Heidl

1. Introduction

A total number of 142 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between March 1990 and April 2000 in an application study with the preparation SANUKEHL Klebs 6X drops. The homeopathic test preparation, SANUKEHL Klebs, consists exclusively of Klebsiella pneumoniae e volumine cellulae in the 6th decimal potency.

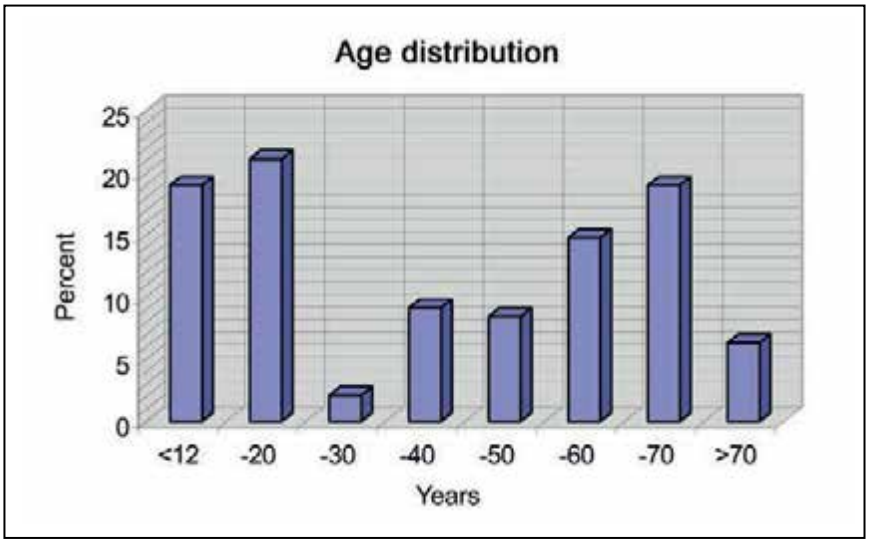
The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children. In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients were included in the study who had at least received one dosage of the medicament.

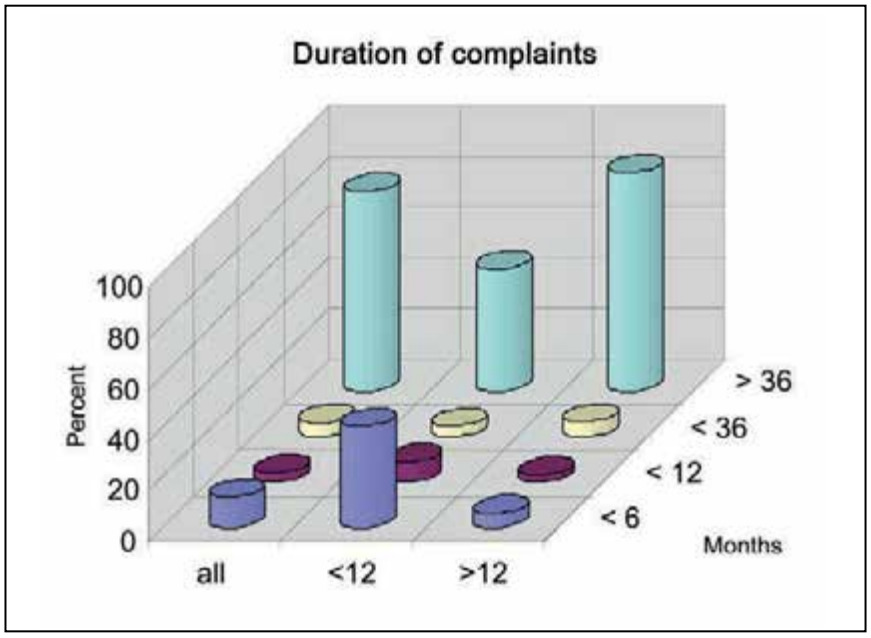
2. Participating Patients

142 patients participated in the study comprising of 58 men (40.8%) and 84 women (59.2%). The age of the patients varied between 3 and 91 years, with an average age of 38.3 and a standard deviation of 24.7 years. Almost the same number of patients was in the groups under 12 years (19.0%), between 13 and 20 (21.1%) and 61 and 70 (19.0%). Between 21 and 30 were only 2.1% of the patients, while the groups between 31 and 40 (9.2%) and 41 and 50 (8.5%) were of comparable sizes. Between 51 and 60 years were 14.8% and over 70 years 6.3% of the patients. In the age structure, the men with an average age of 41.0 ± 22.7 were on average 4 years older than the women with 36.5 ± 25.8 years. Height was on average 151.4 ± 19.6 cm and weight 57.1 ± 20.7 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Klebs 6X, according to Isopathy, is used in a very wide application range. The preferred application was independent of the patient's age. The main indications were sinusitis, bronchitis and bronchial asthma. A diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form. In order to obtain a measure for chronic diseases, the patients were asked in the study protocol how long they had endured the disease or complaints. Time frames were given of less than six months, up to one year, up to three years and more than three years. Only 12.0% of the patients had suffered complaints for less than six months, 3.8% between six and 12 months and 5.3% between one and three years. More than three quarters (78.9%) of all patients suffered for more than 36





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	12.0	40.0	5.6
< 12	3.8	8.0	2.8
< 36	5.3	4.0	5.6
> 36	78.9	48.0	86.1

months. The existence of the complaints was nearly the same in acute and chronic conditions in the patients under 12. 40.0% of these patients suffered for less than six months but also 48% for more than 36 months. A suffering period of over 36 months was especially pronounced in 86.1% in the adult group of patients over 12 years. Only 5.6% suffered from acute complaints with a duration of up to six months.

Of the 142 patients included in the study, 27 had already been treated before with SANUKEHL Klebs 6X drops, thereof six patients in the age group under 12 years.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

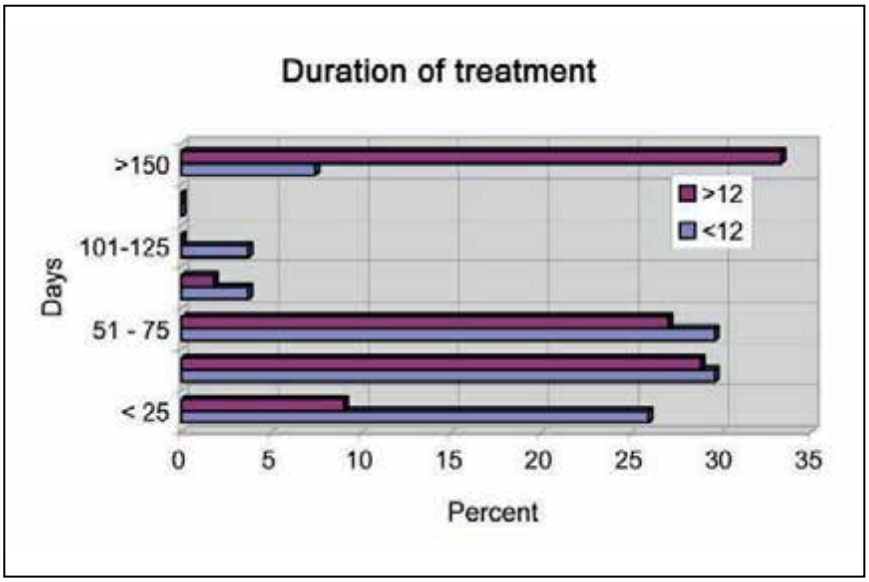
According to the nature of an application study, the physician was not given a preset time limit for the final patient assessment. This final examination was conducted after a period of 16 to 926 days, with an average value of 142.5 ± 161.4 days. Amongst the children (< 12 years) the therapy lasted on average 70.7 ± 86.4 days and was approximately only half as long compared with the adult group with 159.6 ± 170.2 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that amongst the children (< 12 years) the therapy duration up to 100 days was clearly in the foreground (85.2%) of all patients. Amongst the adults, the largest groups were those with more than 150 therapy days (33.3%) and between 25 and 50 days (28.8%) of the patients.

3.2 Dosage

The dosage was set as follows, according to the package insert: Oral application: for acute conditions: 5 - 10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day. External application: Every 1 – 2 days, 5 - 10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

105 patients took the drops orally and 89 patients were treated externally. Multiple counts were necessary, as 52 patients were treated orally and additionally externally. The following table states the medium dosage of the application forms. The drops are related to the daily oral intake or external application respectively.

The recommended dosage was taken. In the group under 12 years, the drops for oral application were dosed according to age. The external application was nearly the same dosage in the children and adult group. The medium dose in monotherapy was the same as in the combination therapy. The slightly higher average value of the external application is due to the high dosage of 20 drops for one patient.



4. Comparison with Former Therapy

Six children and 21 adults had undergone previous treatment with SANUKEHL Klebs 6X drops in the past five years. This group is too small to compare first-time application users and repeated application users. By a comparison of efficacy and tolerance in both patient groups (first-time and repeated application users) hints for a possible sensitisation towards the ingredient could be stated. However, it is remarkable that both physicians and patients assessed the tolerance with repeated application users with "very good" and "good".

5. Efficacy and Tolerance

5.1 Evaluation of Efficacy by Doctor and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 46.1% of the patients thought efficacy to be "very good" and 52.5% "good", whilst only 1.4% assessed the efficacy with "moderate". The results of the physicians' evaluation for efficacy

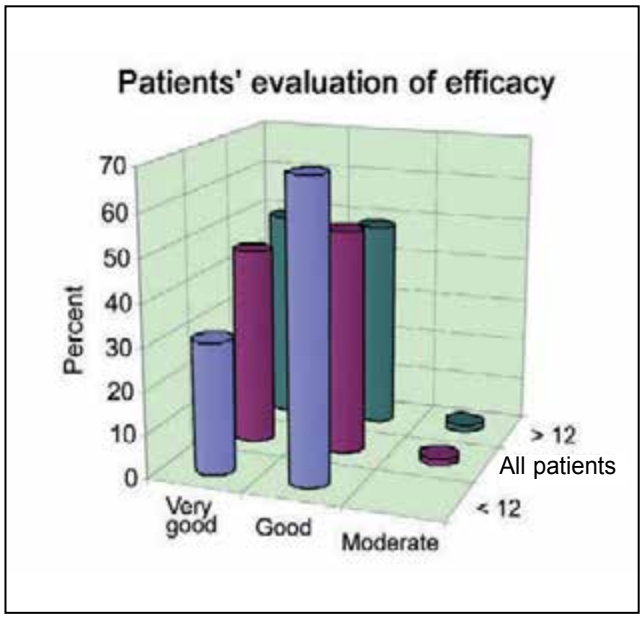
Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	14.8 ± 5.9	2	20
Drops (topical)	6.2 ± 2.5	5	20

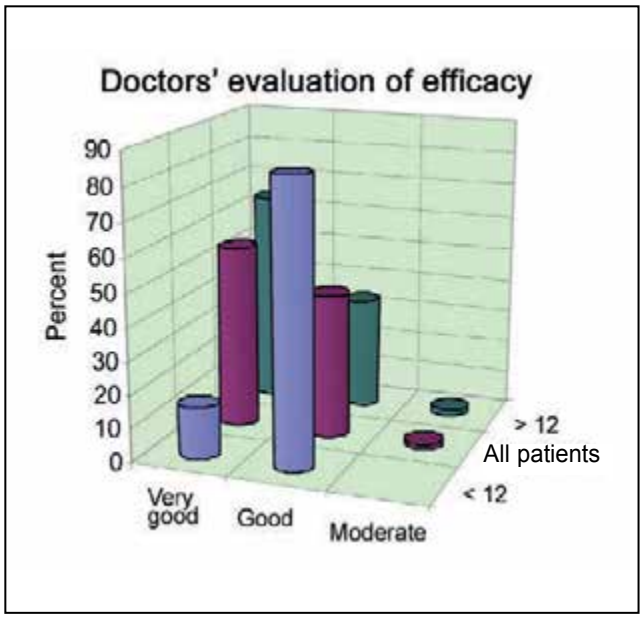
All Patients under 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	9.8 ± 5.3	2	20
Drops (topical)	6.0 ± 2.0	5	10

All Patients over 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	16.3 ± 5.1	6	20
Drops (topical)	6.2 ± 2.5	5	20

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	14.3 ± 6.1	4	20	Monotherapy
Drops (oral)	15.2 ± 5.5	2	20	Combitherapy
Drops (topical)	7.6 ± 3.2	5	20	Monotherapy
Drops (topical)	5.2 ± 1.0	5	10	Combitherapy

Evaluation of Efficacy								
Patient group	**Patients' opinion [%]**				**Doctors' opinion [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	46.1	52.5	1.4	0	55.3	43.3	1.4	0
< 12 years	30.8	69.2	0	0	15.4	84.6	0	0
> 12 years	49.6	48.7	1.7	0	64.3	33.9	1.7	0





was similarly positive as that of the patients. The physicians evaluated efficacy in 55.3% of the cases as "very good", 43.3% as "good", 1.4% as moderate whilst neither patient nor physician assessed "no effect". The evaluation by physicians and patients alike was according to tendency better in the adult's group, as here was a shifting from "good" to "very good" in comparison with the children group.

Compliance (N = 138) was assessed by the physicians to be "very good" for 67 patients and "good" for 71 patients, hence 97.2% of all patients participating in the study were given a "good" or "very good" compliance rating. No patients were given a "moderate" or "non-compliant" rating.

5.2 Evaluation of Tolerance by Doctor and Patient

At the conclusion of the study, an evaluation of tolerance was submitted by the physicians and patients, whereby an assessment of "very good", "good", "moderate" and "poor" could be chosen. 58.9% of patients and 56.7% of physicians rated the tolerance to be "very good", whilst 41.1% of patients and 43.3% of physicians gave SANUKEHL Klebs 6X a "good" tolerance rating. No case was assessed as "moderate" or "poor" with the patients and physicians alike.

In the age group over 12 years, the physicians rated the tolerance with "very good" and "good" and was a little better than that of the age group under 12 years. In the younger age group, the assessment shifted a little more from "very good" to "good".

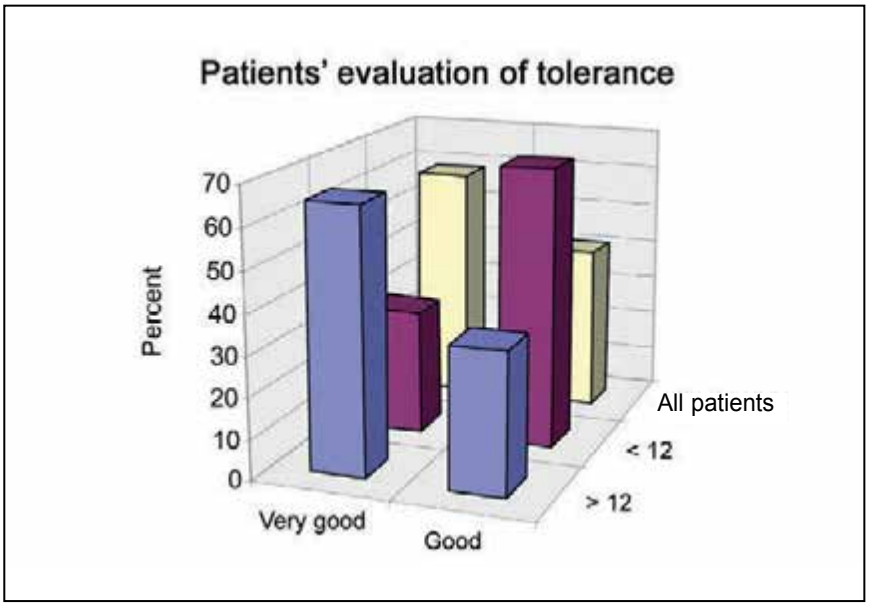
5.3 Side Effects and Discontinuation of the Therapy

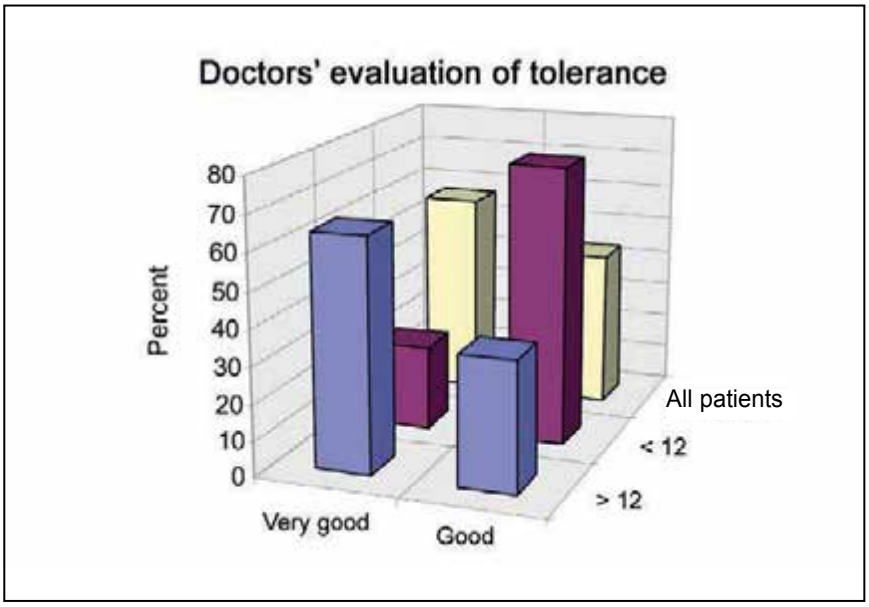
No patient discontinued the therapy with SANUKEHL Klebs 6X and no side effects were reported.

6. Summary

A total number of 142 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between March 1990 and April 2000 in an application study with the preparation SANUKEHL Klebs 6X drops. The homeopathic test preparation, SANUKEHL Klebs, consists exclusively of Klebsiella

Evaluation of Tolerance								
Patient group	**Patients' opinion [%]**				**Doctors' opinion [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	58.9	41.1	0	0	56.7	43.3	0	0
< 12 Years	30.8	69.2	0	0	23.1	76.9	0	0
> 12 Years	65.2	34.8	0	0	64.3	35.7	0	0





pneumoniae e volumine cellulae in the 6th decimal potency.

SANUKEHL Klebs 6X was used in a very broad application range in accordance with Isopathy, whereby the preferred application was independent of the patients' age. The main indications were sinusitis, bronchitis and bronchial asthma. Accompanying therapies were to be documented in the evaluation form.

Amongst the children under 12 years the therapy lasted on average 70.7 ± 86.4 days and was approximately only half as long compared with the adult group with 159.6 ± 170.2 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the children under 12 years, the therapy duration up to 100 days (85.2% of all patients) was clearly in the foreground. Amongst the adults, the largest groups were those with more than 150 therapy days (33.3%) and between 25 and 50 days (28.8%).

105 patients took the drops orally and 89 patients were treated externally. Multiple counts were necessary, as 52 patients were treated orally and externally. Six children and 21 adults were treated formerly with SANUKEHL Klebs 6X drops during the past five years. This group is too small to compare between first-time and repeated application users. The therapeutic progress was determined by evaluations conducted respectively at the beginning and the end of the therapy. 98.6% of the patients and physicians rated the efficacy of the therapy as "very good" and "good". The evaluation by physician and patient was, according to tendency, better in the adult's group, as here was a shifting from "good" to "very good" in comparison with the chil-

dren group. For 97.2% of all patients participating in the study, compliance was certified to be "good" or "very good". 58.9% of patients and 56.7% of physicians rated the tolerance to be "very good", whilst 41.1% of patients and 43.3% of physicians gave SANUKEHL Klebs 6X drops a "good" tolerance rating. Neither patients nor physicians assessed the tolerance with "moderate" or "poor". No therapy was discontinued and no side effects occurred. □

First published in the German language in the SANUM-Post magazine (88/2009)

The Therapeutic Application of Haptens

High Significance as Antigen Absorbers

by Peter Cornelius

The author of this article, a general practitioner, relates his extensive experience with Haptens as "antigen absorbers". The article was previously published in 1993 in the periodical "Naturheilpraxis" (the nathuropathic practice) for wider circulation. The following reprint is an authorised republication.

I have already talked about the possibilities of the therapeutic use of haptens in my book "Nosoden und Begleittherapie" ("Nosodes and Accompanying Therapy", Pflaum-Verlag, Munich). The term *hapten* derives from the Greek haptein, which means to cling, to stick. It refers to substances that can loosely bond with antigens (=carriers), which are then called conjugated antigens. It happens that an immune response in the organism may become possible only after such a bonding of a carrier, which means that some antigens may be absorbed and eliminated by the immune system only after the application of a dose of haptens. In any case, the process is at least accelerated by said application.

Ricar in Argentina has long been producing isolated haptens extracted from pathogen-cultures for therapeutic purposes. As these are protein-free polysaccharides, their patient-application is comparatively unproblematic. Approximately 20 years ago I was first provided with a few ampoules by a supplier who planned on importing the haptens to Germany. He gave me hardly any indication as to their application (not even in the form of Argentine literature), forcing me to figure out what these remedies might be useful for by medicament testing.

Meanwhile, I have used far more than 1000 hapten ampoules. Only twice have patients complained of exhaustion after an injection and I could not otherwise determine any side effects. According to my experience there are interesting application options for haptens in allopathic medicine as well as in homeopathy, and here especially as a supplement to the isopathic nosode therapy. These options are best described in case studies.

The application of haptens in allopathic medicine is described in the following two case studies:

Patient Example 1

In one family both father and son suffered from persistent diarrhoea. The stool-examinations showed massive intestinal candida mycoses as the cause for both. The son was symptom-free very soon after an antimycotic treatment with Nystatin. The father, however, did not seem to respond to this therapy. Even the treatment with Amphotericin did not alleviate his symptoms. Nevertheless, the mycological stool findings were much improved, with pathogenic yeasts hardly detectable.

The fact that this condition was immediately ended with one ampoule of Candida hapten allows for the assumption that the whole panoply of problems was maintained by a poor immune response to the released and persisting antigens even after the germs had been destroyed.

Patient Example 2

An elderly female patient developed a tonsillar abscess that was incised and treated with antibiotics by an otorhinolaryngologist. During the incision of the abscess, it was inevitable that the patient swallowed a portion of the pus which caused a large quantity of the streptococci toxins to reach the digestive tract and was thus absorbed. The patient felt very ill and complained of pain in all her joints. A few hours after the injection of one ampoule Estrepto-hapten the problems were much improved and her well-being was completely restored after a second injection the following day.

Due to the frequency of these pathogens we can assume that such patients already had prenatal contact with said toxins, resulting in the development of an immune tolerance against the respective carriers that can be broken only by a dose of the corresponding hapten. Haptens have therefore become indispensable to me as intermittents in nosode-therapy.

Patient Example 3

I chose the nosode-therapy for a patient, whose staphylococci adnexitis had been treated with antibiotics by her gynecologist. According to

him the local findings had subsequently improved satisfactorily, but the patient complained that her general well-being had drastically changed for the worse, with specific problems in veins and circulation. The complaints were improved with Estafilhapten, but not to her satisfaction. This now called for the nosode Staphylococcus aureus, which was applied according to the KUF-sequencing principle. The patient reacted to each dose of the nosode with such violent headaches and circulatory disturbances that one to two ampoules of Estafilhapten had to be administered intermittently. That alone enabled me to successfully complete this nosode-therapy as planned. As a preventive thrombosis treatment, MUCOKEHL D5 was mixed with the nosode-injections.

Patient Example 4

A thirty-year-old male patient with serious problems in the lumbar region was diagnosed with discopathy of the 4th and 5th lumbar vertebrae by computed tomography. Surgery was strongly recommended and he came to me in his search for alternatives. According to my test results he needed the Tuberculinum avis nosode with Teucrium scorodonia as a complementary medication. The very first injection resulted in a considerable deterioration which was remedied in a few hours with one ampoule Polisaccharido de BCG.

As described above, this patient also required a dose of the appropriate hapten after each application of the nosode. After the 10th and last application of the nosode the patient had fully recovered and decided against surgery. As the problems in this case were obviously based on a tuberculinic trait, surgery could not have lead to success. But in this case the nosode therapy also could not have been completed without the application of the haptens.

The last two examples further strengthen the hypothesis that nosode-therapy mobilises toxins stored in the body in order to eliminate them from the body.

I had access to the following haptens:

1. Polipse (=Polisaccharido de Pseudomonas) from Pseudomonas aeruginosa; available as SANUKEHL Pseu 6X/5X (the matching nosode is “Bac. Pyocyanens”),
2. Polysaccharido de BCG from Mycobacterium bovis (BCG); available as SANUKEHL Myc 6X/5X (the matching nosode is “Tuberculinum bovis”),
3. Estreptohapten from Streptococcus pyogens; available as SANUKEHL Strep 6X/5X (the matching nosode is “Streptococcinum”),
4. Estafilhapten from Staphylococcus aureus; available as SANUKEHL Staph 6X/5X (the matching nosode is “Staphylococcus aureus”),
5. Candida-Hapten from Candida albicans; available as SANUKEHL Cand 6X/5X (the matching nosode is “Monilia albicans”),
6. Proteus-Hapten from Protens vulgaris; available as SANUKEHL Prot 6X/7X (the matching nosode is “Bac. Protens”),
7. Brucel-Hapten from Brucella abortus-Bang (the matching nosode is “BANG”); available as SANUKEHL Brucel 6X
8. Haptenovacuna from Proprionibacterium acnes; available as SANUKEHL Acne 6X/5X (the matching nosode is “Corynebacterium anaerobius”),
9. Polycel from tumor tissue,
10. Arthritis-Hapten,
11. two hapten complexes, combinations of different haptens.

Additionaly, the following SANUKEHL-preparations are available:

SANUKEHL Serra 6X/7X
from Serratia marcescens,

SANUKEHL Klebs 6X
from Klebsiella pneumoniae,

SANUKEHL Coli 6X/7X
from Escherichia coli (the matching nosode is “Bac. Coli”),

SANUKEHL Trich 6X/5X
from Trichophyton verrucosum (the matching nosode is “Trichpytie”),

SANUKEHL Salm 6X
from Salmonella enteritidis (the matching nosode is “Bac. Gärtner”).

It is understood that the haptens can be used as intermittents with nosodes of the same kind. They may also frequently be required before a nosode-therapy is started. Patients who, for example, eat a lot of cheese from the Balkans frequently require the Brucella hapten, even before the Bang nosode can be tested.

Ad 1.: Polipse (SANUKEHL Pseu) cannot only be used with the nosode Pyocyaneus, but also with nosodes of the Salmonella-group and occasionally with a few virus nosodes.

Ad 2.: Polisaccharido de BCG (SANUKEHL Myc) should be made part of the emergency kit as it is frequently

the first useful remedy for acute alimentary, non-infectious tuberculo-toxicoses which may occur after the consumption of tuberculous poultry or eggs. Such tuberculo-toxicoses may manifest themselves in the form of acute, frequently monarticular arthritis, as iridocyclitis or as sudden (apoplectiform) deafness. Therapy with the Tuberculinum avis nosode – if required with initial and intermittent hapten doses – proves to be the only causal treatment.

Ad 3.: Estreptohapten (SANUKEHL Strep) can be used with Streptococci (diseases) as well as with pyrogens.

Ad 4.: Estafilhapten (SANUKEHL Staph), usually used with Staphylococci nosodes, is sometimes also used with dental sources of infections.

Ad 5.: Candida hapten (SANUKEHL Cand) can be used as intermittent with all mycotic nosodes.

Ad 6.: Proteus hapten (SANUKEHL Prot) often has to be applied in bladder disorders after seemingly successful antibiotic treatments of Proteus cysticydes (which, although improving the urine results, do not improve the patients' complaints), most frequently quite clearly in combination with the Bacterium proteus nosode. It can alleviate many chronically recurrent urinary tract infections of mostly younger female patients.

Ad 7.: Brucel hapten (SANUKEHL Brucel) frequently uncovers Brucella militense.

Ad 8.: Haptenovacuna (SANUKEHL Acne) is not only required with Corynebacteria, but also with many other chronic and acute diseases of the respiratory tract. It may be used as an intermittent with almost all influenza-nosodes, with Branhamella and other ENT pathogens.

Ad 9.: Policel and

Ad 10.: Arthritis hapten cannot yet be described, as they have not yet been sufficiently researched.

Ad 11.: One hapten complex also contains a Coli-hapten that I had no access to in its pure form. I used it very successfully on a patient in combination with the Erythema nosode. □

First published in the German language in the SANUM-Post magazine (23/1993)

Statistical Evaluation of an Application Study with SANUKEHL Pseu D6 (6X) Drops

by Dr. Reiner Heidl

Introduction

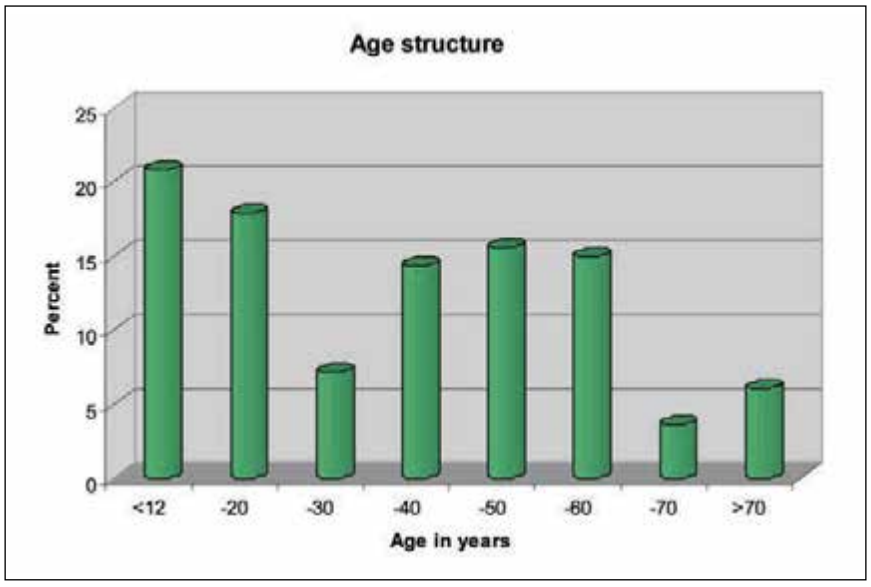
A total number of 168 patients in four medical practices, one specializing in internal medicine, one in surgery and two in general medicine, participated between May 1991 and May 2001 in an application study with the preparation SANUKEHL Pseu D6 (6X) drops. The homeopathic test preparation, SANUKEHL Pseu, consists exclusively of Pseudomonas aeruginosa in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. Furthermore it was also of importance to determine the acceptance of the preparation on the market, especially among children.

In line with the study's set-up, only descriptive statistical methods were used. An "intention-to-treat" evaluation was carried out, which means that all those patients were included in the study who had at least received one dosage of the medicament.

Participating Patients

168 patients participated in the study, comprising of 67 men (39.9 %) and 101 women (60.1 %). The age of the patients varied between 5 and 92 years of age, with an average age of 34.8 years and a standard deviation of 20.4 years. The two largest groups comprised of patients under 12 years (20.8 %) and between 13 and 20 years (17.9 %). Only 7.1 % of all patients were aged between 21 and 30 years, followed by the three age groups of 31 to 40, 41 to 50 and 51 to 60, which were almost equally represented at 14.3 %, 15.5 % and 14.9 %. 3.6 % of the patients were aged between 61 and 70 and 6 % of all patients belonged to the group aged over 70. The age structure was equal for both men and women. The moderate age of the men was evaluated at 34.0 ± 20.0 years, and the women were 33.7± 21.2 years.



Illus. 1

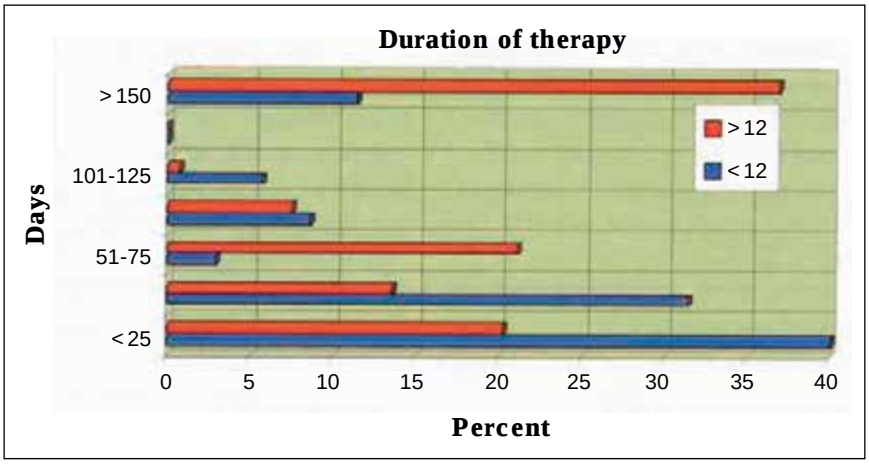
Height varied between 110 cm and 190 cm, with an average of 159.4 cm ± 18.5 cm. Weight varied between 19 kg and 115 kg, with an average of 61.1 kg ± 19.8 kg.

Diagnoses and Secondary Diseases

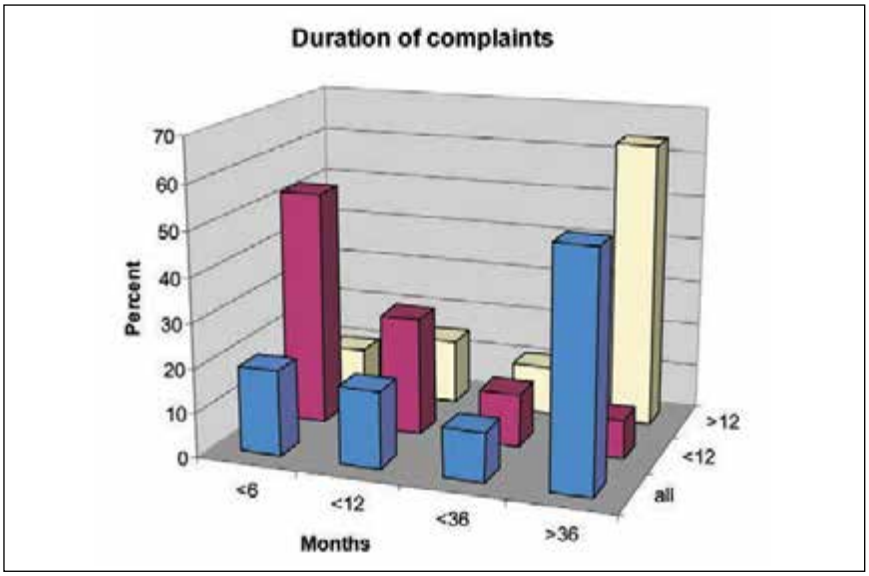
The diagnoses leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Pseu, according to Isopathy, is used in a very wide applicational range. The preferred application was for tonsillitis, sinusitis, bronchitis, laryngitis and pharyngitis in both the children's as well as the adult groups. A thorough diagnosis was made before the start and at the end of the therapy respectively. Accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure for chronic diseases, it was asked in the study protocol how long they have endured the disease or complaints. The time-frame was given of less

than six months, up to one year, up to three years and more than three years. 19.1 % of the patients had suffered complaints less than six months, and 17.3 % less than 12 months. 11.1 % had been ill for a time period between one and three years, and more than half the participants (52.5 %) had been ill or had suffered complaints for more than 36 months. The existence of the complaints was shifted more in the direction of acute conditions in the under 12 patients. 52.9 % of these patients suffered for less than six months and 26.5 % for a period between six and 12 months. Only 11.8 % of the patients in this age group had complained of symptoms for a time period between one and three years and a remainder of only 8.8 % of patients had recurrently shown symptoms for more than three years. In the adult group of patients over the age of 12, the proportion of patients with a period of complaints of 36 months and longer was especially pronounced at 64.1 %. Only 10.2 % suffered from acute complaints with a duration of up to six months, whilst the share of patients with complaints of between six and 12 months were still represented with 14.8 %. 10.9 % of the patients in the adult group registered a duration of complaints between one and three years. Because in both patient groups the main indications were given as angina, sinusitis, bronchitis, laryngitis and pharyngitis, the comparison of the age groups shows that children were most frequently treated for acute conditions of these diseases, while chronic complaints stood in the foreground among the adults.



Duration of complaints (months)	Total patient population (%)	Patients > 12 years (%)	Patients < 12 years (%)
< 6	19,1	52,9	10,2
< 12	17,3	26,5	14,8
< 36	11,1	11,8	10,9
>36	52,5	8,8	64,1



Consultation Times, Therapy Duration

According to the nature of an application study, the physician was not given a preset timelimit for the final patient assessment. This final examination was conducted after a period of 12 to 370 days, with a moderate of 137.5 days ± 140.9 days.

Among children (< 12 years) the therapy lasted for 69.8 days ± 90.7 days; less than half the lenght of time than in the adult group with 155.1 days ±146.3 days. The differentiated evaluation within specific therapy

Total Population	med. dosage	min dosage	max. dosage
Drops for oral application	13.3 ± 7.5	4	30
Drops for external application	6.6 ± 2.3	5	15
All patients below 12 years of age	med. dosage	min dosage	max. dosage
Drops for oral application	9.4 ± 3.5	4	20
Drops for external application	6.6 ± 2.2	5	10
All patients over 12 years of age	med. dosage	min dosage	max. dosage
Drops for oral application	14.3 ± 7.9	5	30
Drops for external application	6.6 ± 2.8	5	15

Monotherapy / Combination Therapy (Total Population)	med. dosage	min dosage	max. dosage
Drops for oral application	13.8 ± 7.0	4	30 mono
Drops for external application	12.6 ± 8.3	4	30 combo
Drops for oral application	8.2 ± 3.1	5	15 mono
Drops for external application	6.3 ± 2.4	5	15 combo

periods allows for a clear picture. It reveals that among the age group of the children below 12 years, the primary therapy duration lasted up to 25 days (40 % of all patients) and between 25 and 50 days (31.4 %). Among the adults, the largest group with 36.8 % was the one with more than 150 therapy days and only 20.3 % with a therapy duration of up to 25 days.

Dosage

The dosage was set as follows, according to the patient package insert:

Oral application: 5 –10 drops (every 12 to 24 hours) with acute conditions; 10 drops every 2nd day with chronic progressive forms.

External application: Every 1 - 2 days, 5 - 10 drops at the location of the complaint or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

156 patients took the drops orally and 72 externally. Multiple counts were necessary as 58 patients took the drops orally as well as externally. 97 patients only took the drops orally (monotherapy), and 13 patients exclusively for external application. The average dosage based on the form of application is shown in the following table. The drops are based on the daily oral and external applications.

The recommended dosage was taken. In the group of patients under the age of 12, the drops for oral and external application were dosed according to age. The medium dosage for oral as well as for external application in monotherapy did not differ significantly from that used in the combination therapy.

Comparison to Previous Therapy

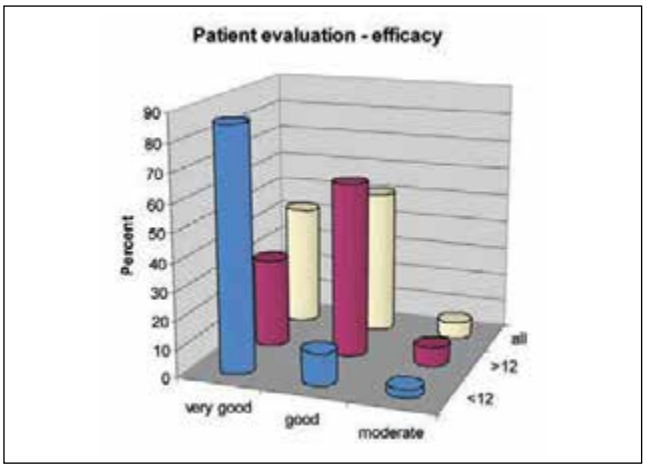
Only five patients had been previously treated with SANUKEHL Pseu D6 (6X) drops from 1992 to 1995, at that time used exclusively for oral application. Since this patient group was too small, the comparison of efficacy and tolerance in two patient groups of first-time application users and repeated application users became redundant. It should, however, be noted that these five patients tolerated both the previous as well as the current therapy well and without side effects.

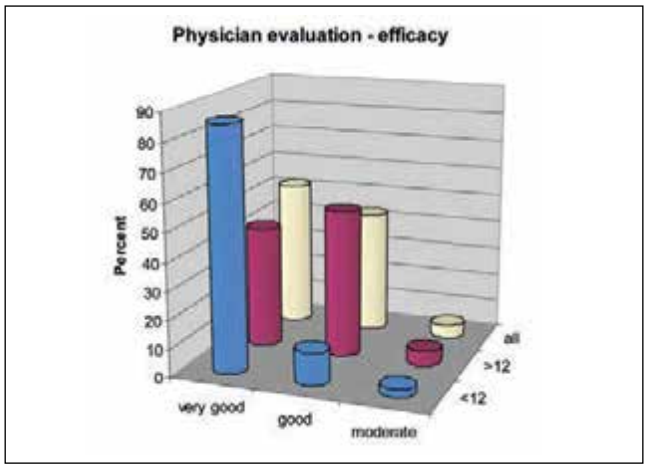
Evaluation of Efficacy by Physician and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with “very good“, “good“, “moderate“ or “no effect“. The physicians were also requested to evaluate patient compliance as above with “very good“, “good“, “moderate“ or “non-compliant“. The evaluation of efficacy showed that 94,1 % of the patients thought efficacy to be “very good“ and “good“, while only 6 % thought it was

Evaluation of Efficacy

patient group	Patient evaluation (%)				Physican evaluation (%)			
	very good	good	moderate	no effect	very good	good	moderate	no effect
All patients	42.9	51.2	6.0	0	51.8	43.5	4.8	0
< 12 years	85.7	11.4	2.9	0	85.7	11.4	2.9	0
> 12 years	31.6	61.7	6.8	0	42.9	51.9	5.3	0





"moderate". Neither physicians nor patients assessed the evaluation with "no effect". The result of the physicians' evaluation for efficacy was like that of the patients. The physicians evaluated efficacy in 51.8 % of the cases as "very good", in 43.5 % as "good" and in 4.8 % as "moderate". The evaluation by physicians and patients alike was significantly better in the childrens' group than in the adult group. Significantly more chronic disorders were treated in the adult group than that of the children, which may have lead to a slightly worse evaluation. Summing up more than a total of 90 % of the adults evaluated the efficacy to be "good" or "very good". The compliance (N = 168) was assessed by the physicians to be "very good" for 85 patients and "good" for 68 patients. Hence 91 % of all patients participating in the study were given a "good" or "very good" compliance rating. 15 patients were given a "moderate" compliance rating and no patients were evaluated as "non-compliant".

Evaluation of Tolerance by Physician and Patient

An evaluation of tolerance was submitted by the physicians and patients at the conclusion of the study, whereby an assessment of "very good", "good", "moderate" and "non-compliant" could be chosen. 60.1 % of patients and 57.7 % of physicians rated the tolerance to be "very good", whilst 38.1 % of patients and 42.3 % of physicians gave SANUKEHL Pseu a "good" tolerance rating. 1.8 % of the patients rated it "moderate". No case was assessed as "moderate" with the physicians.

In the childrens' group, tolerance was rated "very good" by 100 % of children and the physicians alike.

Side Effects and Termination of Therapy

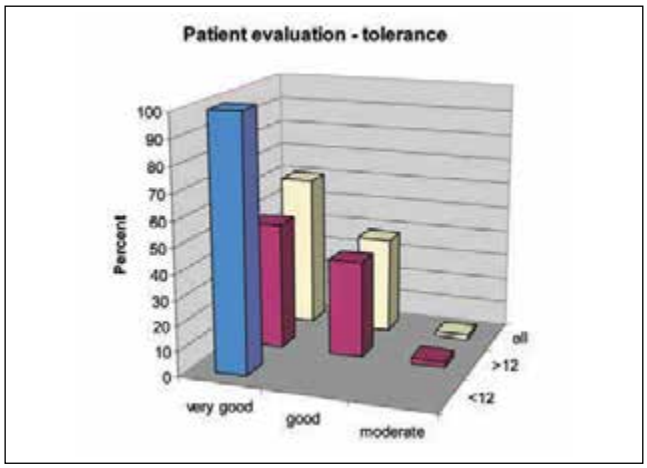
A 57-year old female patient prone to infections after an encephalitis and neuropathy of the legs did not return for her follow-up examination. Upon telephonic inquiry she indicated that she had terminated the therapy, because she could not determine any improvement. Both patient and physician rated tolerance as "very good". The patient did not discontinue the treatment for reasons of intolerance or side effects. The physician put her unauthorized therapy termination down to the fact that the patient was known to suffer from depression. No other therapies were discontinued and further side effects of the medicament did not occur.

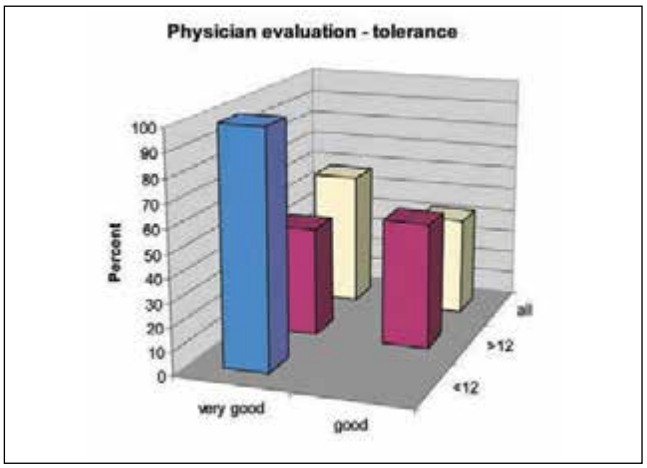
Summary

A total number of 168 patients in four medical practices, one specia-

Evaluation of tolerance

patient group	Patient evaluation (%)				Physican evaluation (%)			
	very good	good	moderate	poor	very good	good	moderate	poor
All patients	60.1	38.1	1.8	0	57.7	42.3	0	0
< 12 years	100	0	0	0	100	0	0	0
> 12 years	49.6	48.1	2.3	0	46.6	53.4	0	0





lizing in internal medicine, one in surgery and two in general medicine, participated between May 1991 and May 2001 in an application study with the preparation SANUKEHL Pseu D6 (6X) drops. The homeopathic test preparation, SANUKEHL Pseu, consists exclusively of Pseudomonas aeruginosa in the 6th decimal potency.

SANUKEHL Pseu was used in a very broad applicational range according to Isopathy. The preferred application was for angina, sinusitis, bronchitis, laryngitis and pharyngitis in both, children as well as the adult groups. A thorough diagnosis was made previous to the start of the therapy as well as after its completion. Accompanying therapies had to be documented in the evaluation form.

Among children (< 12 years) the therapy lasted with 69.8 days ± 90.7 days less than half the length of time than in the adult group with 155.1 days ±146.3 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the age group of children below 12 years, the primary therapy duration lasted up to 25 days (40 % of all patients) and between 25 and 50 days (31.4 %). Among the adults, the largest group with 36.8 % was the one with more than 150 therapy days and only 20.3 % with a therapy duration of up to 25 days.

156 patients took the drops orally and 72 patients took them externally. Multiple counts were necessary as 58 patients took the drops orally as well as externally. 97 patients took the drops orally (monotherapy), and 13 patients exclusively for external application. The recommended dosage was taken. In the group of patients under 12 years, the drops for oral and external application were dosed according to age. The medium dosage for oral as well as for external application in monotherapy did not differ significantly from that used in the combination therapy.

The therapeutic progress was determined by evaluations conducted respectively at the beginning and the end of the therapy. 94.1 % of the patients and 95.3 % of the physicians rated the efficacy of the therapy as “very good“ and “good“. The evaluation by physician and patient was much better in the children’s group than in the adult group. For 91 % of all patients participating in the study, compliance was certified to be “very good“ or “good“.

60.1 % of the patients and 57.7 % of the physicians rated tolerance as “very good“, while 38.1 % of the patients and 42.3 % of the physi-

cians gave SANUKEHL Pseu a “good“ tolerance rating. 1.8 % of the patients rated it “moderate“. None of the physicians rated tolerance in any of the tested cases as “moderate“. In the childrens’ group, tolerance was rated “very good“ by 100 % of the children and physicians alike.

A 57-year old female patient did not return for her follow-up examination. Upon telephonic inquiry, she indicated that she had terminated the therapy, because she could not determine any improvement. Both patient and physician rated the tolerance as “very good“. The patient did not discontinue the treatment for reasons of intolerance or side effects. The physician put her unauthorized therapy termination down to the fact that the patient was known to suffer from depression. No other therapies were discontinued and further side effects of the medicament did not occur. □

First published in the German language in the SANUM-Post magazine (63/2003)

The Immunomodulatory Profile of SANUKEHL Pseu

by Dr. R. Kunze and J. Hartmann (Ph. D., Biology)

Among the Isopathic/Homeopathic preparations, SANUKEHL Pseu belongs to the active group of "Haptens", which is to say that, in this case, rather than using entire bacterial cells or larger structures such as cell walls as active ingredients, a very specific extract is used, enriched primarily with cellwall polysaccharides.

Based an current knowledge, therapy using "Haptens" should be particularly well suited to absorb pathogen toxins and antigens or circulating immune complexes and to dissipate the resulting reaction blockades (CORNELIUS, *Nosoden und Begleittherapie* [Nosodes and Adjuvant Therapy] 1990).

Immunological experiments were performed in order to identify more precisely the action mechanisms of SANUKEHL Pseu on the body's immune system. These investigations were immensely helpful in expanding our understanding of the clinical effect of SANUKEHL Pseu. Clinical observation does not by itself permit any conclusions regarding the distinctive immunomodulatory characteristics of the active substance; for this, one needs to carry out the appropriate investigations in test tubes. Specific immunological reactions were experimentally simulated which proceed (somewhat) the same in the organism, but which, of course, are not measurable in the organism or the blood. Nearly all modern immunomodulatorily active substances are investigated, tested and characterized as to their effects by this and similar methods.

1. The **target cells** of the active substance in the cell population of human venous blood (leukocytes) should be determined; these determinations should yield information concerning the kind of modulation of the cascade of endogenous immune reactions.
2. The **effect on phagocytosis performance** of monocytes and granulocytes, as the primary reaction of the immunocompetent cells, was investigated.
3. The **direction of modulation** of the immune system should be recognized: dominance of cellular or humoral immunity by investigating cytokine induction in dormant and active peripheral mononuclear leukocytes.
4. The **immune-complex-binding** properties were analyzed.

1. Identification of the Immunological Target Cells for SANUKEHL Pseu

Bacterial antigens bind to various kinds of immunological structures, among them, as humoral components, the complement proteins and, as cellular structures, the surface molecules of cells and, in particular, of leukocytes. In part, the interaction between cell and bacterial antigen is based an the preceding reaction with the humoral factors; this is known as "opsonization". There are known specific receptors for bacterial endotoxins (lipopolysaccharide = LPS). One of them, CD14, is found on monocytes/macrophages. The cell is activated via these receptors, inducing the "oxidative burst" and/or stimulating cytokine synthesis. Binding of endotoxin to free soluble CD14 then neutralizes LPS.

Moreover, there are other cell surface molecules that can react with bacterial structures after opsonization, including complement and immunoglobulin receptors. Therefore, identifying immunomodulatory properties is important for an understanding of the clinical effect of bacterial antigens. This includes characterization of binding and phagocytosis of the bacterial active substance SANUKEHL Pseu on leukocytes.

To this end, the active ingredient of SANUKEHL Pseu was coupled to a fluorescing dye (fluorescein isothiocyanate = FITC) and, after incubating Pseu-FITC with freshly-isolated human blood leukocytes, the binding – or the relative amount of bound Pseu-FITC – on the cell surface was measured by means of analytical flow cytometry.

Results

Pseu-FITC binds with roughly equal intensity to the surface of all three leukocyte populations (monocytes, granulocytes, lymphocytes). Preferential or selective binding to one cell type has not been detected. A specific receptor or binding site for binding Pseu-FITC has not been able to be identified.

Pseu-FITC binding to the surface of cells is probably nonspecific. Buildup of Pseu-FITC on the cell surface cannot be reduced by using non-marked Pseu-FITC. This would be expected if there were a specific receptor as binding partner for Pseu on the cell surface.

The idea of a nonspecific binding capability for Pseu-FITC on the surface of various cell subpopulations is supported by the experimentally demonstrated binding of Pseu-FITC on intact yeast cells, which exhibit structures on their surface that probably bind Pseudomonas. Receptors of this sort (e.g. the so-called mannose receptor) are ubiquitous.

2. Phagocytosis Modulating Properties of SANUKEHL Pseu

a) The modulatory capacity of phagocytosis performance on monocytes and granulocytes of peripheral blood can be determined by means of a biocatalyst. Phagocytosis, an "archaic" and primary reaction of immunocompetent cells, is an important indicator for finding out the modulatory pathways of immunological feedback control systems.

Both monocytes and granulocytes are capable of phagocytosis of particles and microbial components. With the selected method, the number of phagocytizing cells and the phagocytosis performance of individual cell populations can be determined. Both parameters are important for the characterization of immunocompetent cells in terms of their phagocytotic properties.

Heparinized whole blood was incubated with fluorescenttagged Pseu (Pseu-FITC) and, after lysis of the erythrocytes, analyzed by means of analytical flow cytometry.

Results

Pseu-FITC is phagocytized both by granulocytes and macrophages. Based on the previously obtained results in identifying the target cells, it seems likely that this is not a case of receptor-mediated phagocytosis. The adhesion potential of Pseu-FITC is in all likelihood considerably reinforced by binding with anti-Pseudomonas antibodies. This immune complex can, via additional receptors – e.g. Fc receptors – react with the surface of phagocytes.

b) Whether SANUKEHL Pseu impairs or promotes phagocytosis of zymosan was investigated by means of analytical flow cytometry.

Results

We were unable to observe any influence of SANUKEHL Pseu on the phagocytosis of zymosan-FITC by granulocytes/monocytes (Zymosan is a yeast-cell-wall preparation from *Saccharomyces cerevisiae).* Pseu itself binds, dosage-dependent, to the surface of yeast cells *(Candida albicans).* This does not lead to an increase in phagocytosis performance, neither does it influence it negatively, however.

3. Cytokine Induction in Peripheral Mononuclear Blood Cells

Peripheral mononuclear blood cells (monocytes) were isolated from the blood of regular blood donors and incubated with various concentrations of the SANUKEHL Pseu active factor. The initial reaction was performed first with dormant monocytes and then with active cells. Artificially-produced immune complexes from human IgG were used as stimulus.

Various cytokines were found in the cell culture population, which were synthesized as the monocytes' and lymphocytes' reaction to contact with SANUKEHL Pseu:

Final Results

IL-4 could not be determined in the cell culture population; IFN-g was clearly detectable only in 1 of 3 blood donors (the same was true of IL-2 in very low concentration). The other cytokines were released in easily-detectable concentrations in all 6 donors: SANUKEHL Pseu significantly increased – dosage-dependent – the synthesis of **TNF-α, IL-1ß, IL-6, IL-10 and GM-CSF** compared to the control with no test substance.

• TNF-α	= Tumor Necrosis Factor α
• IL-1β, -2, -4, -6, -10	= Interleukin 1β, -2, -4, -6, -10
• IFN-γ	= Interferon γ
• GM-CSF	= Granulocyte/Monocyte Colony-Stimulating Factor

The following results were particularly remarkable:

- In the case of **TNF-α** and **IL-10**, a significant increase was detectable even at an active factor concentration of 10 ng/ml (=8X).
- In the presence of the immune complexes, the cytokine production of **TNF-α** and **GM-CSF** increased significantly even more.
- **GM-CSF** exhibited weak induction under the sole influence of SANUKEHL Pseu, but very strong induction as a result of synergy between SANUKEHL Pseu and immune complexes (cf. *Figs. 3-7).*

Monocytes and B lymphocytes are presumably stimulated via the immune-complexes; the site of the immune-complex interaction is probably the Fc-receptors of the blood cells (immunoglobulin's Fc component is responsible for antibody complement and receptor binding).

Concerning the Effect of Cytokines

Cytokines are biologically highly-active polypeptides and glycoproteins (size: 15,000 – 30,000D) which play a significant role in many tissues in intercellular signal transmission, in phenotype and the cytoskeletal structure modulation, and in regulation of the proliferation rate or apoptosis. They are synthesized by more than one kind of cell and exhibit a wide spectrum of overlapping functions.

Numerous investigations to date have demonstrated, in vitro and in vivo, both the effects of individual cytokines on particular bone-marrow cells as well as a number of additive and synergistic effects in the area of hematopoesis and the maintenance of immune system defensive preparedness. The labyrinthine interactions among these mediators led to the concept of a functional cytokine network, which is an important element in adapting blood cell production to the organism's current needs.

On the level of activated T lymphocytes, and based on the secreted cytokines of the two subgroups of T helper cells TH1 and TH2, one can determine in which direction the immune system is being stimulated; thus the TH1 cells excrete IL-2 and IFN-g, thereby stimulating cellular immune defenses, whereas TH2 cells excrete IL-4 and IL-10 primarily stimulating humoral defenses (cf. *Fig.1).* The complex cytokine network represents the basis for regulation of the entire hematopoetic process. *Figure 2* illustrates which cytokines intervene in the differentiation of the pluripotent blood stem cells, as well as the maturation of the precursor cells (cf. *Fig. 2).*

The cytokines TNF-α, IL-1ß and IL-6 are often called pro-inflammatory

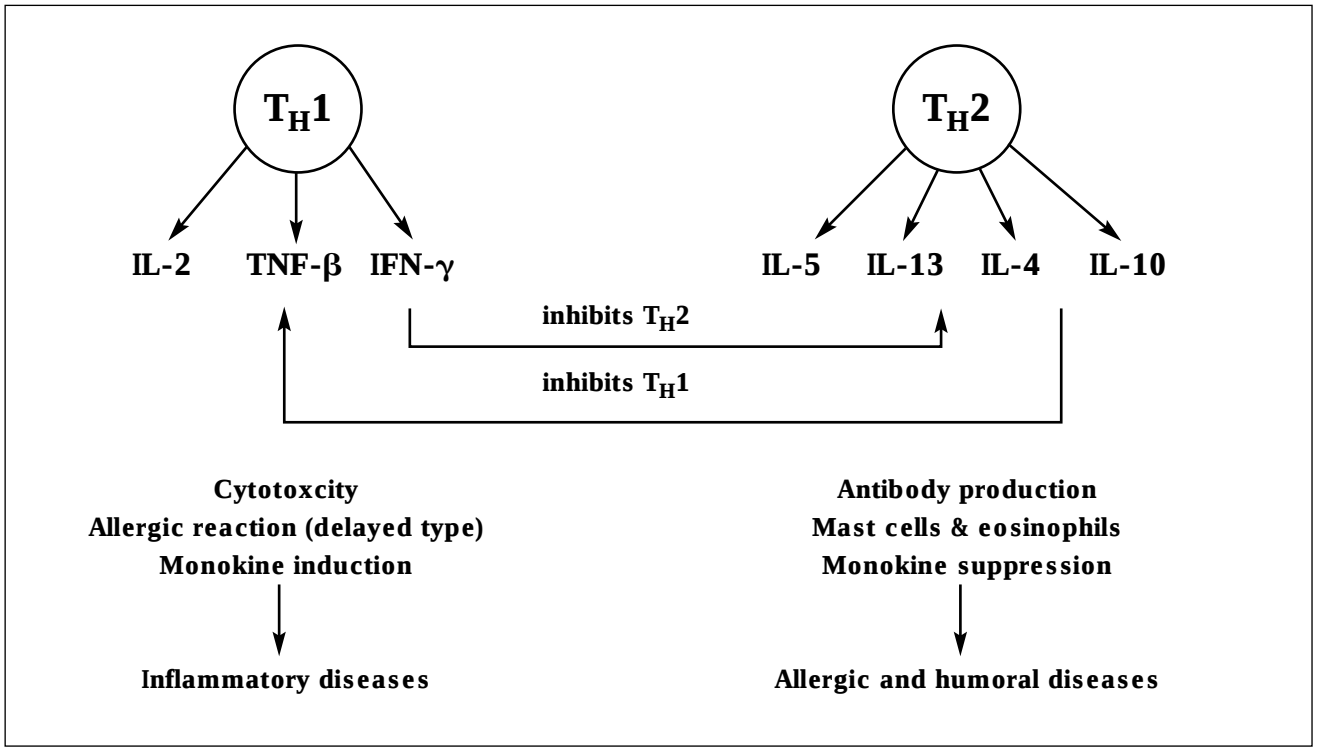


Fig.1: Functional roles and mutual regulation of T_H1 and T_H2 cells.

cytokines. They are produced particularly by immunocompetent cells. They are of great significance for inflammations and combating tumors. These cytokines are induced by bacterial antigens, for example.

Synthesis of TNF-α is activated by a variety of stimuli, such as interferons, GM-CSF, immune complexes. TNF-α exhibits a broad spectrum of biological activities, including:

- Causing cytolysis or cytostasis of many tumor cell lines in vitro
- Inducing hemorrhagic necrosis in transplanted tumors
- Strengthening phagocytosis and cytotoxicity of polymorphonuclear granulocytes
- Responsibility for manifold changes in the endothelium
- Reinforcing the proliferation of T & B lymphocytes, as well as differentiation of the latter.

It is used in cancer therapy as an isolated substance in combination with interferon-γ to heighten the aggressiveness of lymphokine-activated killer cells.

GM-CSF (Granulocyte/Macrophage Colony-Stimulating Factor) is secreted primarily by lymphocytes and macrophages. This cytokine is an important factor for growth and differentiation of granulocytes and macrophages. GM-CSF has a strongly chemotactic effect an neutrophil granulocytes and can reinforce the phagocytic activity of granulocytes and macrophages. It stimulates proliferation and differentiation of hemato-

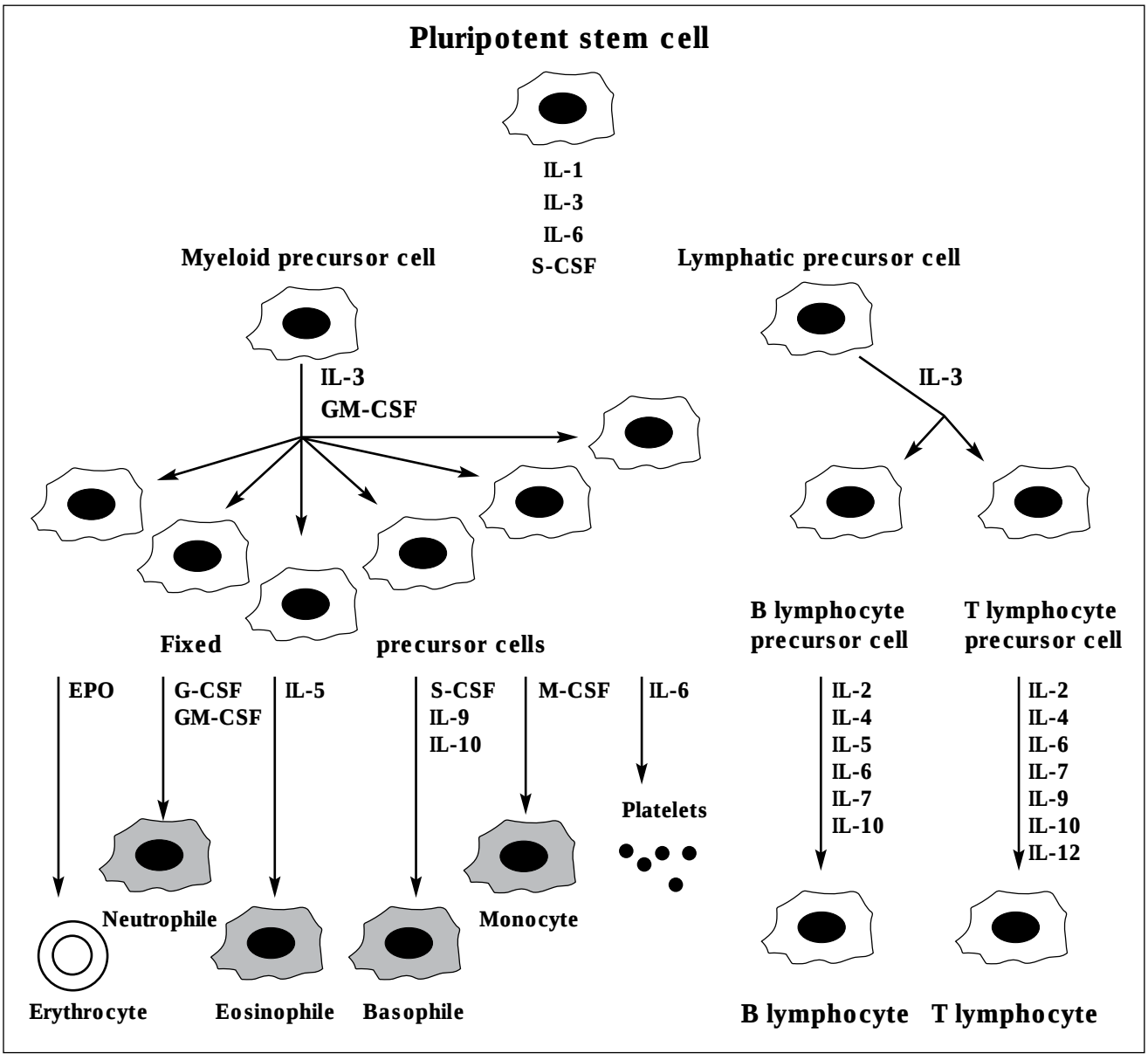


Fig.2: Formation of hematopoetic cells depending on cytokines.

poetic precursor cells and has a myeloprotective effect. Clinical interest was therefore aroused in the treatment of diseases or bodily conditions involving cytopenia (reduced count in the blood of erythrocytes, granulocytes, monocytes or thrombocytes) or its consequences:

- High-dosage chemotherapy in cancer treatment
- Autologous bone-marrow transplants
- Radiation therapy
- Leukemia
- Agranulocytosis
- Aplastic anemia
- Chronic infections.

The cytopenic reaction state can be overcome through the stimulus that GM-CSF effects in the bone marrow by providing a signal for the differentiation and maturation of blood stem cells.

IL-1ß is produced chiefly by activated macrophages, monocytes and neutrophils. Its production is stimulated by other cytokines, as well as by bacterial antigens, endotoxins, viruses, etc. It strengthens hematopoesis in synergy with other hematopoetically active cytokines. The effects include:

- Stimulation of T helper cells for the secretion of additional cytokines (e.g. IL-2)
- Promoting the proliferation of B lymphocytes and the production of immunoglobulins
- Promoting the proliferation and activation of natural killer cells
- Anti-proliferative effect on various types of tumor cells
- Responsible for endothelial changes (both alone and in conjunction with TNF-α
- Participating in inflammation reactions by increasing secretion of inflammatory proteins
- Strongly chemotactic effect on leukocytes
- Generating fever as an endogenous pyrogen
- Influencing hormone synthesis via CNS effects
- Synergistic effect on the induction of GM-CSF production and thereby proliferative effect on blood stem cells.

Clinical attention is focused on the use of IL-1ß in cases of T cell defects, in order to accelerate their reconstruction after massive immune suppression or cytostatic treatment. In animal tests, it exhibits a radioprotective effect, promotes wound healing or stimulates angiogenesis.

IL-6 responds to much the same stimuli as do the other cytokines. It influences antigen-specific immune response and inflammatory reactions. As primary mediator, it induces the so-called "acute phase reaction".
Its biological effects include:

- Differentiation factor for B lymphocytes, stimulation of IgG antibody secretion
- Differentiation and activation factor for T lymphocytes
- Thrombopoetic effect as well as promoting the proliferation of blood stem cells (synergistically with IL-3)
- Involved in the pathogenesis of chronic polyarthritis
- Deregulated expression - i.e. excessive overproduction - in various myelomas
- Cellular and biochemical alterations caused by induction of the "acute phase reaction" - which, in the end, aid in local curtailment of inflammatory processes.

Clinical application is frequently in combination with GM-CSF after high-dosage chemotherapy and bone-marrow transplants.

Unlike the above cytokines, **IL-10** is characterized as an **anti-inflammatory** cytokine. We know from in-vitro experiments that IL-10 **down-regulates** the secretion of pro-inflammatory cytokines such as TNF-α, IL-1ß and IL-6. In this context, this cytokine is also ascribed immunosuppressive properties, and clinical applications for IL-10 have been derived from this, for example in treating chronic inflammations, rejection reactions and autoimmune diseases. The biological effects include:

- Growth and differentiation factor for activated B lymphocytes
- Direct antagonist of TNF-α, which is stimulated by lipopolysaccharides, e.g. in cases of gram-negative sepsis by bacterial endotoxins, meningococcus sepsis
- Anti-inflammatory effect in cases of ulcerative colitis and Crohn's syndrome
- Sharply reduced in cases of alcohol-induced cirrhosis of the liver (whereas TNF-α is overproduced)
- Inhibits blast proliferation (leukocyte precursor) in cases of acute myeloid leukemia.

Summary of Results of the Effect of SANUKEHL Pseu on Cytokines

Sanukehl Pseu does not seem to be cytokine-inducing in every case on the subclass of the T_H1 cells. Therefore, the immunomodulatory effect of SANUKEHL Pseu is more strongly seen to lie in the direction of the T_H2 cells - i.e. of humoral immunity, via:

- Induction of the pro-inflammatory cytokines (TNF-α, IL-1ß and IL-6)
- Induction of the hematopoetic cytokine GM-CSF
- Induction of the anti-inflammatory cytokine IL-10
- In part, considerable increase of cytokine production of TNF-α, IL-1ß, IL-6 and particularly GM-CSF in the presence of immune complexes as immune stimulants.

4. Reaction of SANUKEHL Pseu with Immunoglobulins and Immune Complexes

It has been recognized in recent years that the humoral part of the immune system is more tightly coupled with the cellular part than had previously been thought. The division into two parts turns out actually to be more historical than real. There is a whole series of receptors on the cell surface which can react both with immunoglobulin as well as with other immune-system structures (complement proteins). This network regulates thus via receptors - e.g. antibody production - but also via the induction of certain regulatory cytokines.

An in-vitro test using a microtiter-plate-based ELISA (enzyme-linked immunosorbent assay) was developed to investigate binding properties. The microtiter plates were coated with SANUKEHL Pseu, human serum, human immunoglobulin subclasses or synthesized immune complexes (cf. *3rd below)*, incubated and the quantity of bound immunoglobulin was determined by means of an enzyme reaction.

Results

The test exhibited no relevant binding of the immunoglobulin subclasses IgG1, IgG2 and IgG3 - nor was any expected, since these isolated, so-called "inert" antibodies in all likelihood exhibit no specificity whatsoever regarding Pseudomonas antigens.

On the other hand, there was a concentration-dependent increase in binding with the use of highly-purified but undefined IgG from human

Induction of Cytokine Release by SANUKEHL Pseu in Vitro with Human PBMC

(See the text for illustration details)

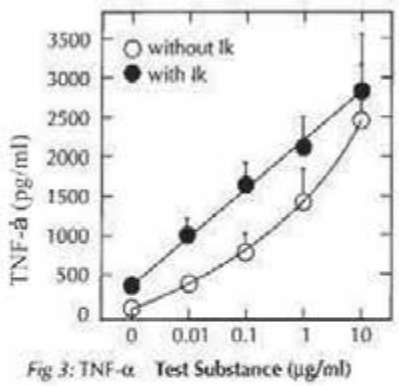


Fig 3: TNF-α

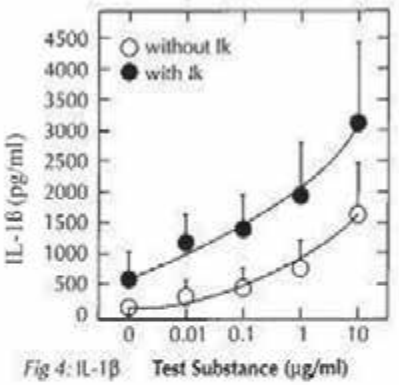


Fig 4: IL-1β

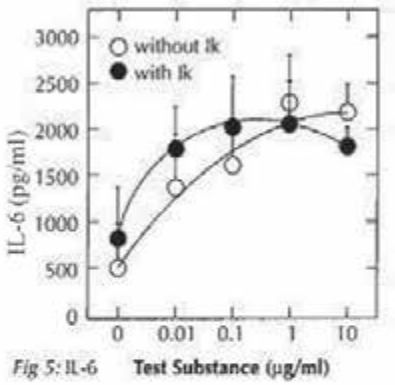


Fig 5: IL-6

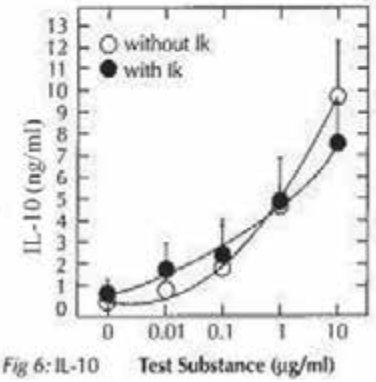


Fig 6: IL-10

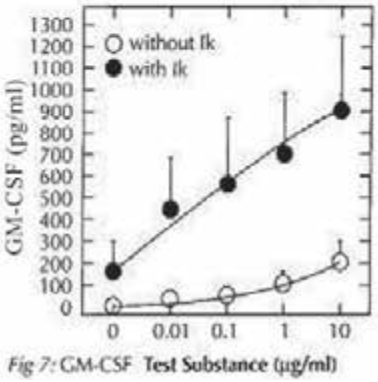


Fig 7: GM-CSF

Cytokine	Zytokin Induction			
	Comparison Contr. vs. San Pseu (without IC stimulation)		Comparison San Pseu vs. San Pseu with IC	
	Test substance concentration		Test substance concentration	
	10ng/ml	10µg/ml	10ng/ml	10µg/ml
TNF-α	⇧	⇧	⇧	⇧
IL-1β	-	⇧	⇧	⇧
IL-6	-	⇧	-	⇩
IL-10	⇧	⇧	-	-
GM-CSF	-	⇧	⇧*	⇧
IFN-γ*	-*	⇧*	⇧	-*
IL-2*	-*	⇧*	-*	⇩*
IL-4	n.p.	n.p.	n.p.	n.p.

* only with one of three cell donors, tendency provable
n.p. not proven
⇧ significant cytokine induction
⇩ reduced cytokine induction
\- no detectable difference

serum (normal donor serum, not from patients). This evidently implies that Pseudomonas antibodies are present in human blood, since the human immune system has undergone confrontation with the antigens of the classic commensal *P. aeruginosa*. This result was confirmed with patient sera, in which antibodies were detectable even before administering SANUKEHL Pseu. Antibodies against the microorganism are evidently a natural part of the immune defense system, which is thus able to control the pathogen.

Summary of the In-Vitro Experiments with SANUKEHL Pseu

An idea can be derived from these results as to how Pseudomonas aeruginosa might work in vivo. The introduction of highly-antigenic enriched SANUKEHL Pseu structures into the immune system (subcutaneously or intramuscularly) probably leads rapidly – because of the immuno-globulins present in the body (antibodies) – to an immune complex formation.

This substance probably represents the actual immune modulator. The effect of the complex likely has less to do with induction of antibodies against SANUKEHL Pseu than with regulation of immunological processes or correction of immunological imbalances, and develops its effect, for example, via induction of cytokines, particularly GM-CSF and IL-10.

The former sends a strong hematopoetic signal to the bone marrow in the form of a pro-inflammatory stimulus, which, after it has had sufficient time to overcome the immune system's reaction blockage, is "reined in" again by the anti-inflammatory effect of IL-10. What is interesting about this activity profile is that, due to the influence of homeopathic dilutions of the SANUKEHL Pseu active substance, the body's own mechanisms for dealing with immune deficiencies are stimulated, whereas conventional tumor therapy tries to achieve this by administering, for example, isolated pure substances from cytokines, but at the cost of triggering side effects that are difficult to control.

The results permit certain conclusions regarding the areas of indication for SANUKEHL Pseu: in disease cases in which an immune defect is involved – whether it be the disease itself or caused by immunosuppressive treatment – SANUKEHL Pseu could be used with immunological justification:

- With patients undergoing radiation therapy
- With patients undergoing cytostatic therapy
- With patients under long-term immune suppression; i.e. for all disease states associated with leukopenia. □

First published in the German language in the SANUM-Post magazine (37/1996)

Eliminating Hydrocortisone-induced Immune Suppression with SANUKEHL Pseu in Vitro

by Dr. R. Kunze and J. Hartmann (Ph. D., Biology)

1. Introduction

The investigations "Identification of Immune Modulatory Properties of SANUKEHL Pseu" made it clear that here was a substance that intervened in the regulatory cycles of cytokine production of mononuclear blood cells.* In its interaction with immune complexes, an increased immunocyte reaction was observed in the induction of cytokines in vitro. The results of these investigations have already been published in SANUM Post.[1,2]

Quite remarkable was the increase in production of the granulocyte monocytecolony stimulating factor (GM-CSF), a regulatory or hematopoetic cytokine. These results led to conclusions concerning the possibilities inherent in a deeper analysis of the immune modulatory potential of SANUKEHL Pseu.

As regards the use of SANUKEHL Pseu, there have been a number of clinical observations that give an indication of the product's immune modulatory effectiveness. SANUKEHL Pseu is evidently able to eliminate immunologically based therapy blockages. The goal of the investigations reported on here was to make these effective properties of SANUKEHL Pseu visible in vitro under defined experimental conditions, using the example of hydrocortisone induced immune suppression.

* *Homeopathic preparation consisting of polysaccharides from* SANUKEHL Pseu *from a homeopathic-isopathic product line from Germany.*

Hydrocortisone was chosen because it is a physiologically occurring immune suppressor. It is produced by the body itself and can induce therapy blockages. In diseases within the indication range of SANUKEHL Pseu, hydrocortisone probably plays a special role. The idea of investigating the effect of SANUKEHL Pseu on hydrocortisone induced cytokine suppression, with the users of the preparation in mind, therefore came quite naturally.

2. Results

We investigated experimentally whether SANUKEHL Pseu, in combination with fixed immunoglobulins (immune complexes), influenced the regulatory or pro inflammatory cytokines GM-CSF and interleukin 1b in the presence of a substance which blocks immune activity (hydrocortisone).

To this end, peripheral mononuclear blood cells (PMBC) from the blood of healthy donors were isolated and incubated with human IgG. Cytokin-production was stimulated through binding to the Fc receptors while saturating PMBC's absorptive binding capacity. Next, the dependence of the formation of the cytokines GM-CSF and IL lb on increasing concentrations of hydrocortisone in the presence of increasing concentrations of SANUKEHL Pseu (and with regard to time) was investigated.

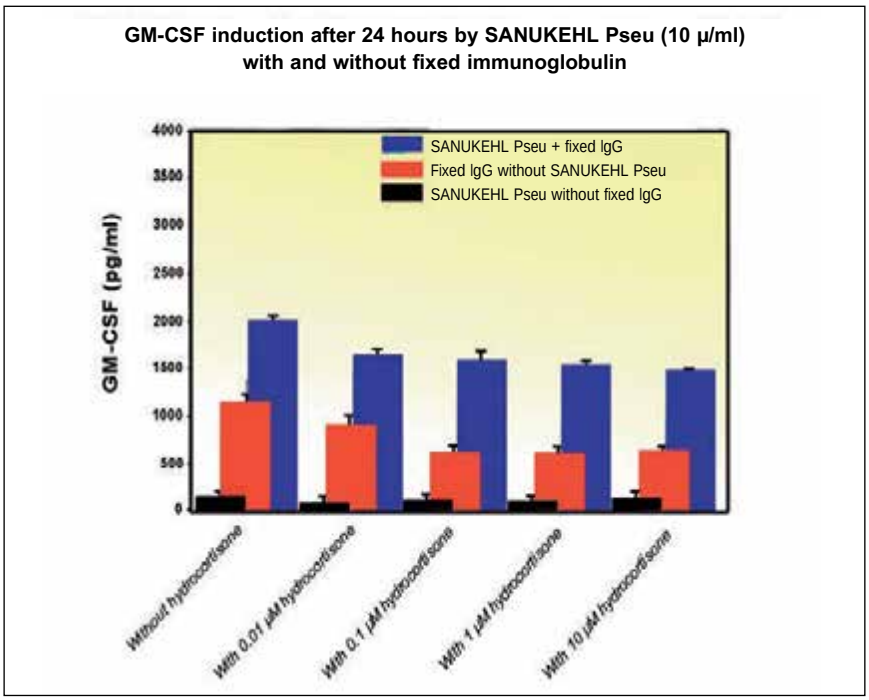


Figure 1

The hydrocortisone concentrations used (0.01-10 µM) cover the human blood plasma concentration range of hydrocortisone, which (subject to a circadian rhythm) varies between 0.11 and 0.55.

The data from one donor representative for purposes of analysis are presented in detail in *Figs. 1 & 6*. The experiments were set up so as to be able to look at individual cases. On this level, relevant results have already been attained.

Based on *Figs. 1-3*, the current data are presented as examples. All cell culture preparations were done in parallel. In the culture preparation without hydrocortisone or immunoglobulin G, SANUKEHL Pseu itself generates a clearly demonstrable GM-CSF level (1st column in *Figs. 1 & 3*). Fixed immunoglobulin by itself generates a clearly higher cytokine signal (2nd column in *Figs. 1 & 3*). The combination of immunoglobulin G with SANUKEHL Pseu increases the cytokine signal considerably (3rd column in *Figs. 1 & 3*). In *Figs. 2 & 3*, in which GM-CSF was set for a later time, this effect becomes even clearer. These data serve as a reference system for the hydrocortisone experiments. An earlier research report detailed the superadditive effect of GM-CSF induction by SANUKEHL Pseu in combination with immune complexes.[2]

In the presence of hydrocortisone (*Figs. 1-3*), there is a more or less concentration dependent immune suppression of cytokine production. In combination with fixed immunoglobulins, SANUKEHL Pseu can, at all tested concentrations and at all times, reduce or eliminate hydrocortisone induced immune suppression.

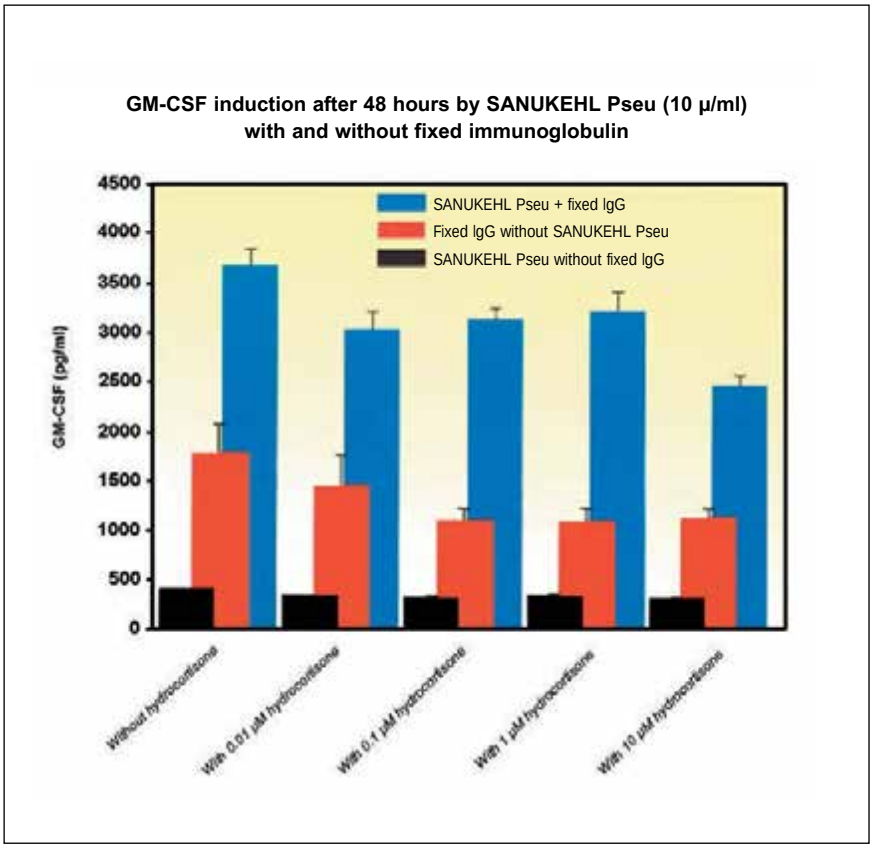


Figure 2

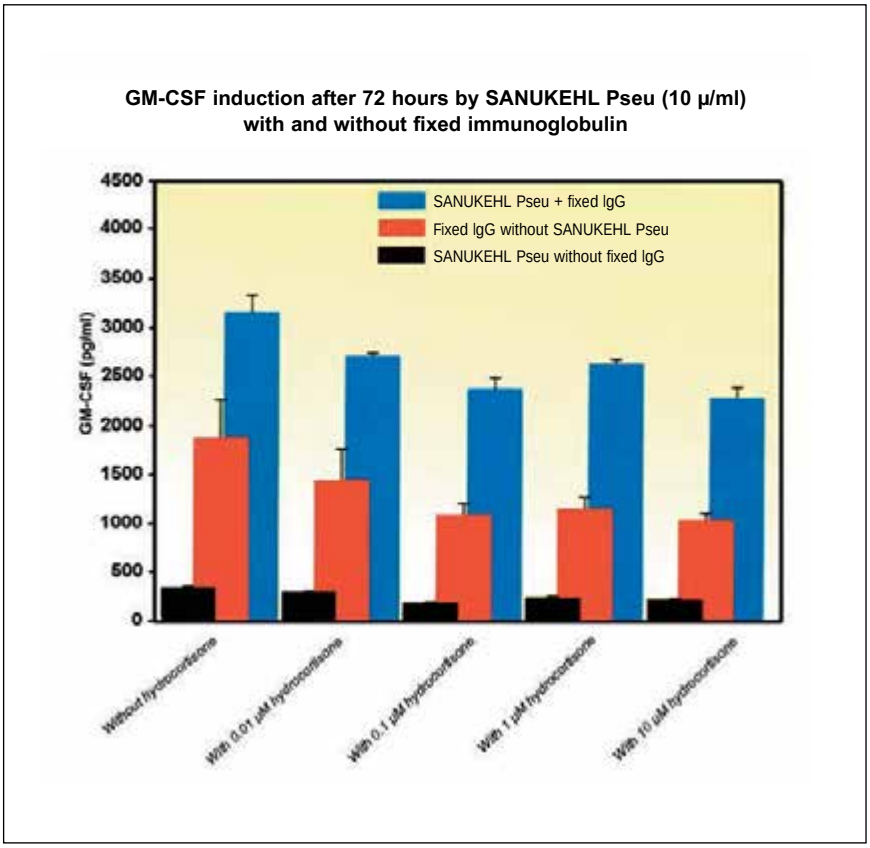


Figure 3

The situation is structured similarly for interleukin 1ß (*Figs. 4-6*). Here also one can note dosage effect relationships between SANUKEHL Pseu and hydrocortisone. In combination with fixed immunoglobulin G, SANUKEHL Pseu is once more able to eliminate hydrocortisone induced suppression. Timewise, the induction of the two cytokines does not differ significantly.

In order to be able to summarize the influence of the amount of SANUKEHL Pseu and the various donors, the values measured with and without SANUKEHL Pseu under fixed IgG were normed to the cytokine production measured with only fixed IgG without SANUKEHL Pseu or hydrocortisone (cytokine value = 100 %).

A 3D bar chart was chosen to clarify the relationships in the reaction triangle hydrocortisone/SANUKEHL Pseu induced cytokine signal. In *Figs. 7 & 8*, one can see that the four donors reacted in very nearly the same way. Increasing SANUKEHL Pseu concentration can more and more reduce or eliminate hydrocortisone induced suppression. The cells of the four donors react similarly at all three of the time points Chosen for cytokine determination.

3. Discussion

At the moment, there exists no commonly accepted model for the molecular mechanisms which lead to compensation or elimination of hydrocortisone induced immune suppression. For the induction of cytokine signals, specific stimuli originating from the extracellular space are transmitted via specific receptors to the interior of the cell, and induce the release or production of cytokines.

Cytokines induced in the second manner can be switched off by hydrocortisone [3,4]. The cell interior has receptors for this molecule which, ultimately, take part in regulating protein synthesis.

There are a number of additional receptors available for the induction of cytokines. These include, for example, the endotoxin receptor CD14 and the Fc receptors to which

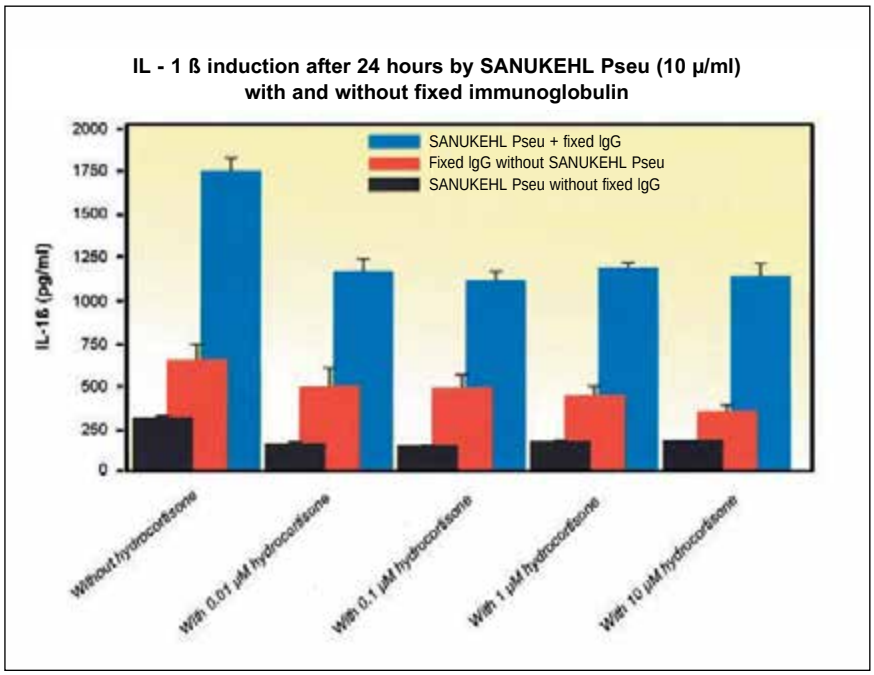


Figure 4

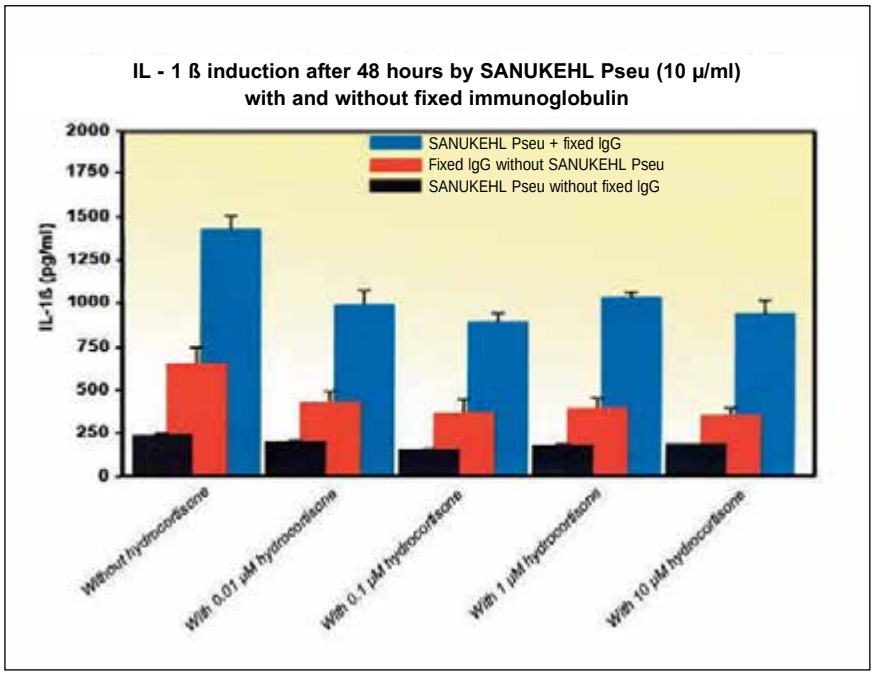


Figure 5

immunoglobulins or immune complexes bind. These also induce a reaction cascade within the cell [5,6] which leads to cytokine production. This is in all likelihood the place to begin in seeking to understand the effect of SANUKEHL Pseu in combination with fixed immunoglobulins or immune complexes.

Other mechanisms are conceivable which could explain the results presented here. A cross linkage i.e. a simultaneous mutual interaction between a ligand or ligand pair (immune complex) and two receptors on the cell surface [7,8] can likewise result in activation of the cell. Both SANUKEHL Pseu and immunoglobulin bound to bacterial antigen could effect the cross linkage via Fc at two receptor types on the cell surface. Another possibility not to be excluded is that different types of cells react with the immune complex or SANUKEHL Pseu, and metabolic products from one type of cell activate another type of cell, which ultimately produces cytokine.

Furthermore, it is conceivable that the effect of SANUKEHL Pseu is based an activating a hither to undiscovered cytokine or chemokine which is involved in the reduction or elimination of hydrocortisone induced cytokine suppression [8-11].

In the immunological technical literature, two molecular mechanisms for corticosteroids are discussed:

- On the genetic level, they inhibit in a complex with their receptors, by binding on the “key“ transformation factors of protein and thus also cytokine synthesis. The particular factors involved are AP-1 and NF-kB [3,4,12].
- As physiological opponents of MIF (macrophagemigration inhibitory factor: possesses immune activating properties), they modulate the reaction potential of macrophages [10,11].

From the viewpoint of clinical immunology, the immune modulatory effect of SANUKEHL Pseu is of fundamental significance for the understanding of its effect on patients. The dependence on the

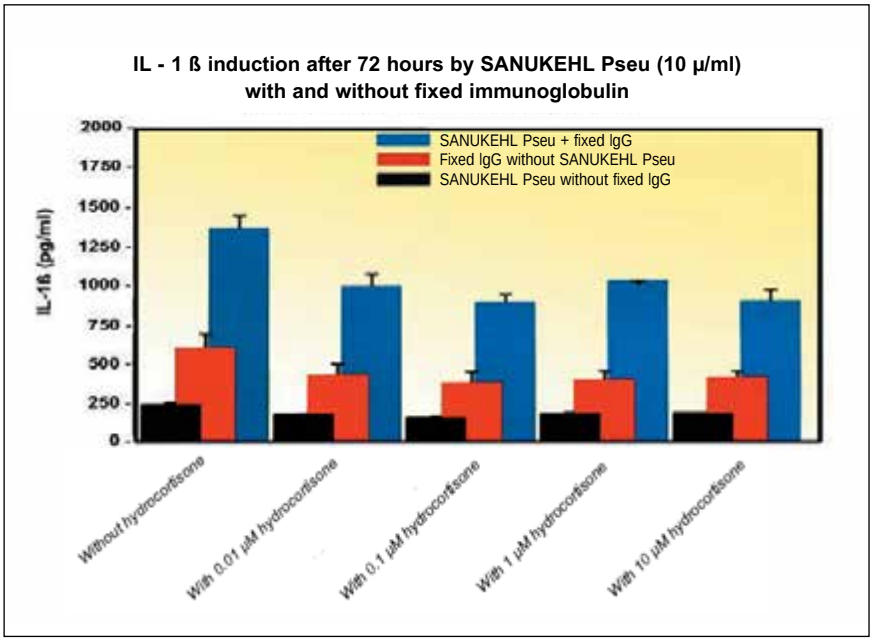


Figure 6

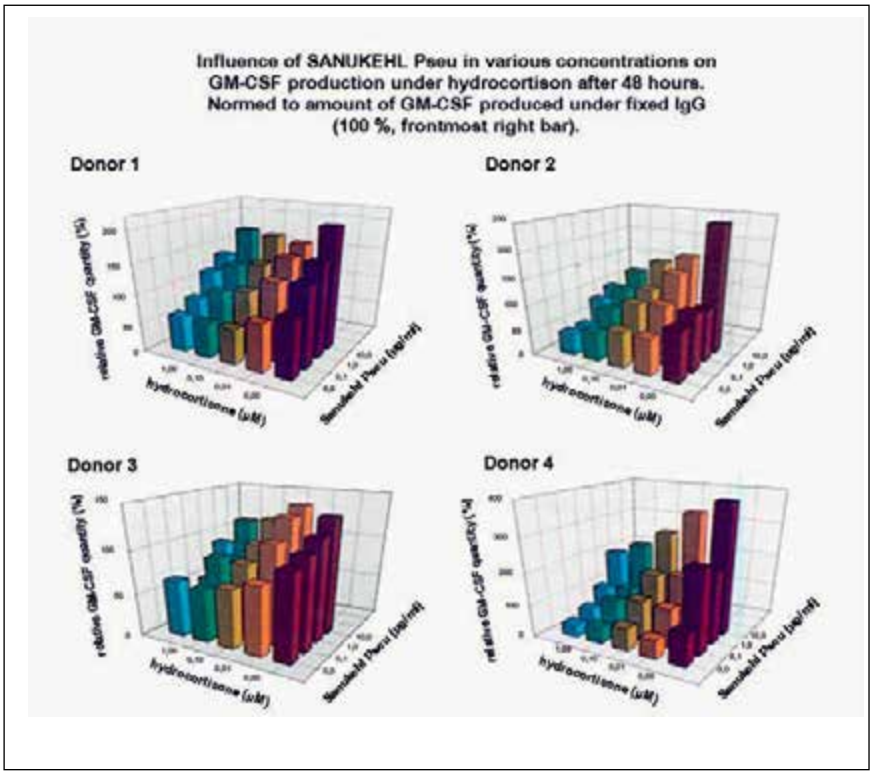


Figure 7

immunopathological processes of various diseases permits adding new areas of indication for the product, at least theoretically at first. What we here have in mind is influencing neuroimmunological processes or else the breakup of immunosuppressive feedback systems set in motion by other substances or processes. This includes, for example, the immunosuppressive, cytostatic effect of Methotrexate or Cyclosporin-A but also radiation induced immune suppression. Immune suppression observed in cases of long term physical or psychic stress might be a future area of indication for SANUKKEHL Pseu.

Another possibility is that of influencing the immunological balance of the TH1/TH2 subpopulation, which regulates the immunological phenotyp (dominance of cellular or of humoral immunity). In the last 8 years, the analysis of the significance of the TH1/TH2 Subpopulation for the development of disease pictures has developed into an independent research field of its own [13,14,15].

Hydrocortisone and other similarly structured immune suppressors can intervene in a fundamental way in the life cycle of cells [3].

Apoptosis, programmed and regulated cell death, has been recognized in recent years as one of the most important processes in the regulation and maintenance of immune homeostasis. It can be assumed that SANUKEHL Pseu positively influences at least some populations of immunocompetent cells, and protects them from hydrocortisone induced or accelerated apoptosis.

These experiments, or the results there from, show that SANUKEHL Pseu in combination with fixed immunoglobulins can minimize or eliminate immune suppression triggered by hydrocortisone.

The observations coming from the clinical application of SANUKEHL Pseu clearly demonstrate that, with this preparation, existing blockages in which various other attempts at naturopathic therapy have failed to improve the condition of the affected patients can be broken up.

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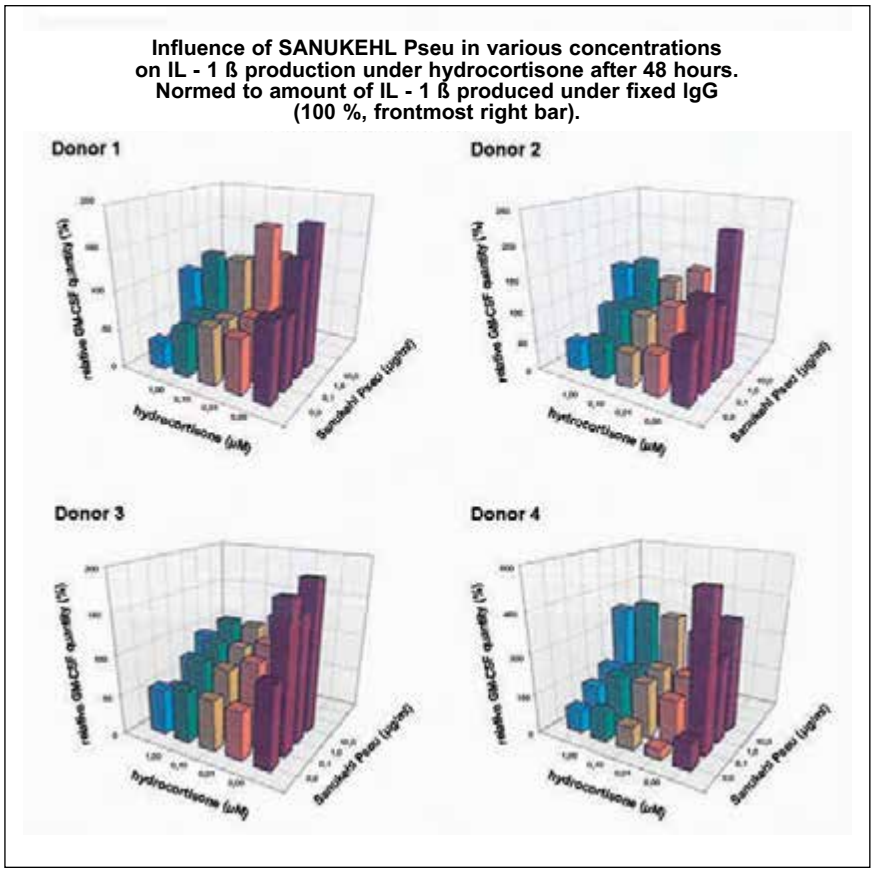

Figure 8

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First published in the English language in the EXPLORE! magazine (Vol.8#3 1997)

Statistical Evaluation of an Application Study with the Preparation Series SANUKEHL Coli 6X / 7X

in the Administration Forms of: Solution for Injection and Drops

by Dr. Reiner Heidl

1. Introduction

From February 1991 to May 2000, a total number of 164 patients was admitted to an observation study with the preparation series SANUKEHL Coli in the administration forms of drops and solution for injection in one internist practice and two general practices. The homeopathic test preparation SANUKEHL Coli consists exclusively of Escherichia coli e volumine cellulae in its 6th decimal dilution for the drops and its 7th decimal dilution for the solution for injection.

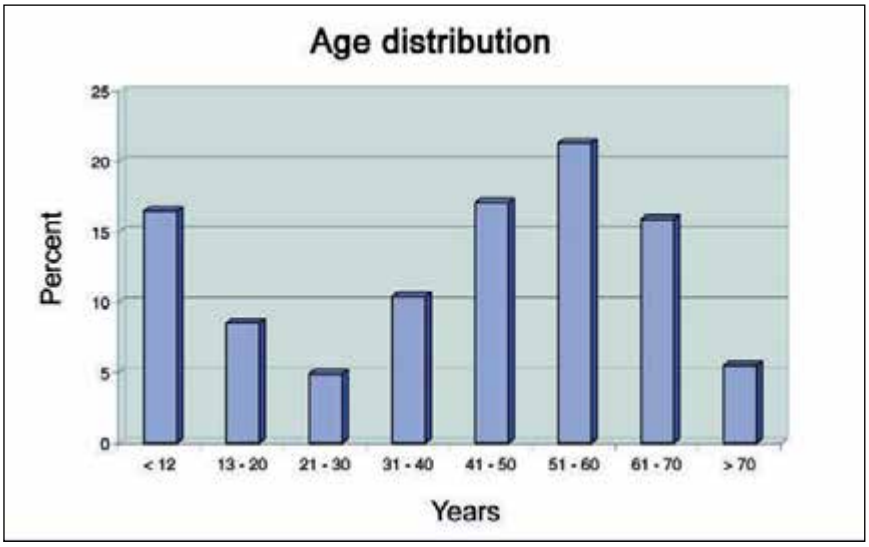
The aim of the observation study was to establish the actual application of the preparation and its tolerance under the conditions of everyday practice. Further, knowledge concerning the acceptance of the preparation on the market, also amongst children, should be gained.

In accordance with the structure of the study, exclusively descriptive statistical procedures were used. The application of inductive methods was not indicated. An "intention to treat" evaluation was carried out, i.e. all patients were considered who had received at least one dose of the remedy.

2. Participating Patients

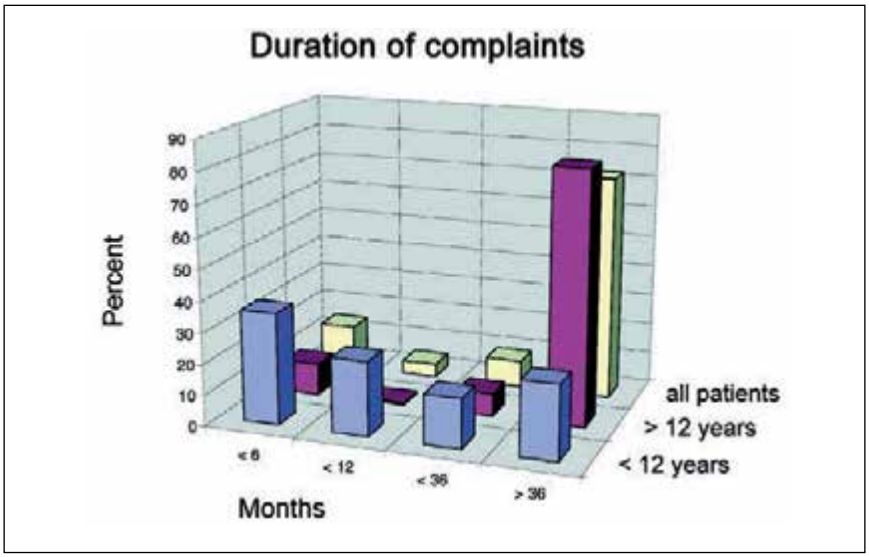
164 patients participated in the study, 77 men (47.8%) and 84 women (52.1%). For 3 patients no information was available. The age of the patients varied between 3 and 98 (!) years with an average of 43.0 years and a standard deviation of 22.6 years. Approximately the same number of patients was to be found in the age groups of under 12 years (16.5%), between 41 and 50 years (17.1%) and between 61 and 70 years (15.9%). 8.5% of the patients were between 21 and 30 years, only 4.9% between 21 and 30 years, and 10.4% between 31 and 40 years. The biggest age group was that of 51 to 60-year-old patients with 21.3%. Finally, 5.5% of the patients were over 70 years of age. In the age distribution, the men with an average age of 47.1 ± 23.2 years were on average 8 years older than the women with 39.3 ± 21.4 years.

Height varied between 115 and 187 cm with an average value of 166.1 ± 14.6 cm. Weight varied between 20 and 90 kg with an average weight of 68.5 ± 16.7 kg.



2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to prescription had to be recorded in the study protocol. It became apparent that SANUKEHL Coli, in accordance with Isopathy, is used in a very wide area of application. The preferred application was independent of the age of the patients. The main indication areas stated were bronchitis, diarrhea, urinary tract infection, cystitis, and prostatitis. Medical findings were collected before and after completion of the treatment.



Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	14.4	36.0	10.4
6 - 12	4.4	24.0	0.7
< 36	8.8	16.0	7.4
> 36	72.4	24.0	81.5

Accompanying therapies were to be documented in the survey form.

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol for how long the disease or complaints had been existent. Time frames were given of less than six months, up to one year, up to three years and more than three years. In 14.4% of the patients, the complaints had existed for less than six months. In only 4.4% of the patients, the complaints had existed for six to 12 months, and in 8.8% for up to three years. 72.4% of all patients had suffered from the medical conditions for more than 36 months. In the patient group of under 12-year-olds, the duration of complaints was shifted towards rather acute conditions. Thus, 36.0% of the patients had suffered from their complaints for less than six months, and only 24% for a period of six to 12 months. Another 24% of the patients in this age group had suffered for more than three years, while 16% stated a period of one to three years. In the adult group of over 12-year-olds, chronic complaints of more than 3 years duration were predominant in 81.5% of the patients. Only 7.4% had suffered for one to three years, and 0.7% of the patients for six to 12 months. A short duration of complaints of up to six months was again stated by 10.4% of the patients.

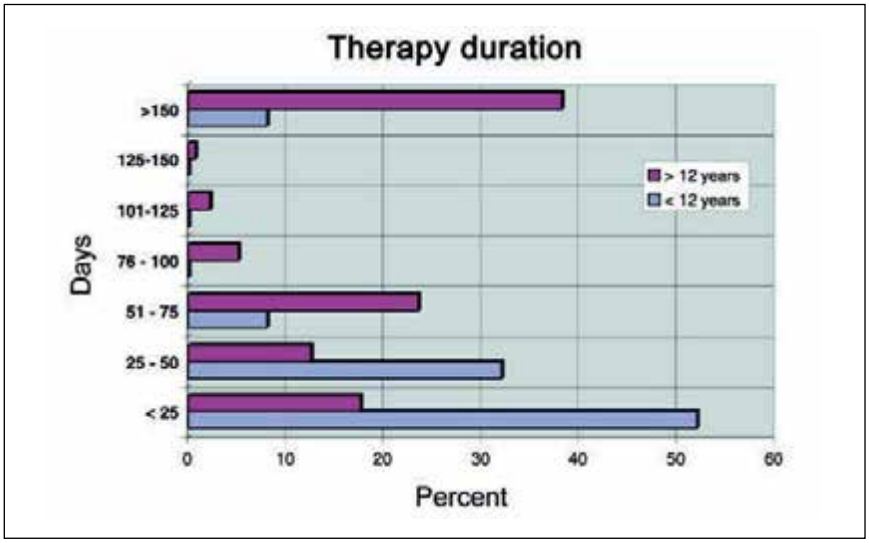
20 of the 164 patients included in the study – all of them over 12 years old – had been treated with SANUKEHL Coli previously.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

Corresponding to the nature of an application study, the doctor was not given a fixed schedule for the final examination. This final examination was carried out after a period of 9 to 727 days with an average value of 156.3 ± 163.2 days.

Therapy duration for the children (< 12 years) with 105.3 ± 197.2 days on average was about 60 days shorter than that for the adult group with 164.9 ± 153.3 days. However,



due to the large range of the values, the average value of the under 12 age group is not significant, and is only determined by a few outliers. A differentiated reflection of the therapy periods offers a better picture. Thus, a therapy duration of up to 50 days is clearly predominant in the age group of under 12-year-olds (84% of all patients). Only 8% of the patients of this age group were treated for more than 150 days. Among the adults, the largest groups with 38.2% and 23.5% of the patients were treated for more than 150 days and between 51 and 75 days, respectively.

3.2 Dosage

Dosage was prescribed for the individual administration forms according to the package leaflet as follows:

Drops:
For oral intake: in acute conditions 5 to 10 drops every 12-24 hours; in chronic forms 10 drops every other day.

For rubbing in: every 1 to 2 days 5 to 10 drops into the affected area or the hollow of the elbow.

After eight weeks of therapy duration, therapy should be paused for several months.

Solution for injection: 1 to 3x weekly 1 ml to be injected subcutaneously.

After four weeks of therapy duration or application of a maximum of 10 consecutive injections, therapy should be paused for several months.

Referring to the administration forms, drops were taken orally by 147 patients and rubbed in by 41 patients, and injections were used by 68 patients. Multiple designations were necessary where both administration forms were combined. In total, drops for oral intake were combined with drops for rubbing in by 36 patients (= 21.9% of all patients), and drops for oral intake with injections by 4 patients (2.4%). The following table shows the medium dose of each administration form. The dosages for drops indicate the daily dose of intake or rubbing in, the dosages for the injections indicate the dose per week.

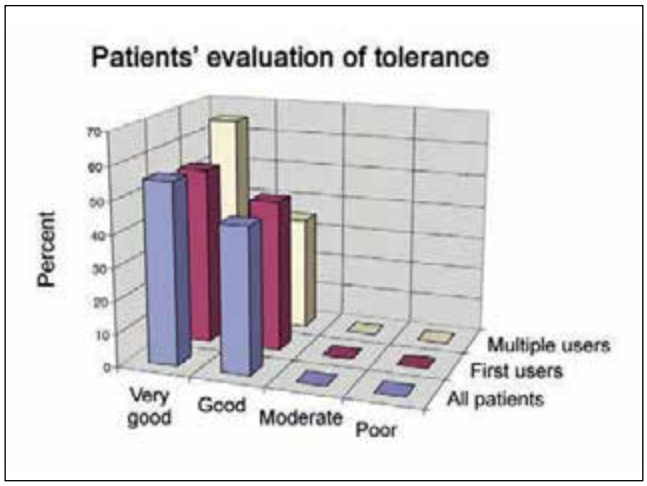
The recommended dose was complied with. In the group of under 12-year-olds, the dosage of drops for oral intake was applied according to the age. Dosage of the drops for rubbing in did not differ substantially from the adult group. The injection volume at 3 ml per week was slightly higher than that of the adults at 2.0 ± 0.9 ml. However, as only two children received an injection, this result cannot be considered representative.

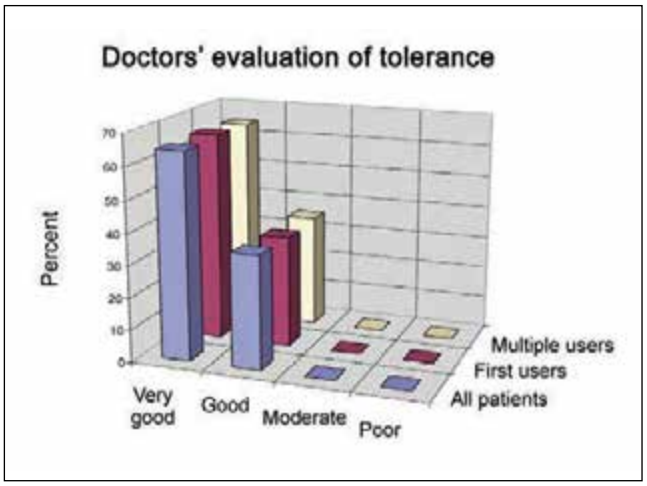
4. Comparison with Former Therapy

20 patients had received a previous therapy with one or more administration forms of SANUKEHL Coli within the last 5 years, with 13 patients receiving drops and 2 patients receiving injections. No data were available for 5 patients. By compa-

Total Population				
	Medium dose	**Minimum dose**	**Maximum dose**	
Drops (oral)	16.2 ± 5.5	4	30	
Drops (topical)	4.7 ± 0.9	2	6	
Injection (ml)	2.1 ± 0.9	0.5	3	
All Patients under 12 Years				
	Medium dose	**Minimum dose**	**Maximum dose**	**No. of patients**
Drops (oral)	9.2 ± 3.7	4	20	27
Drops (topical)	4.2 ± 1.1	2	5	18
Injection (ml)	3.0	3	3	2
All Patients over 12 Years				
	Medium dose	**Minimum dose**	**Maximum dose**	**No. of patients**
Drops (oral)	17.7 ± 4.5	10	30	120
Drops (topical)	5.2 ± 0.4	5	6	23
Injection (ml)	2.0 ± 0.9	0.5	3	66

Evaluation of Tolerance								
Patient group	**Patients' evaluation [%]**				**Doctors' evaluation [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	55.5	44.5	0	0	64.6	35.4	0	0
First user	53.9	46.1	0	0	65.2	34.8	0	0
Multiple user	65.0	35.0	0	0	64.6	35.4	0	0





ring efficacy and tolerance in the two patient groups of first users and multiple users, evidence for a possible sensitization to the active ingredient should be determined.

In the evaluation of tolerance, there were no significant evaluation differences between multiple users and first users. With a very good overall tolerance, both multiple users and first users rated tolerance exclusively as "very good" and "good". From this data, no risk potential concerning a sensitization of the patients to the active ingredient Escherichia coli e voluminae cellulae 6X or 7X can be identified.

By "very good", the first users tended to evaluate efficacy better than the multiple users. Neither doctors nor patients rated the therapeutic outcome as "no effect".

With 66.6 ± 21.2 days, the average therapy duration for the multiple users differed significantly from that for the first users with 171.8 ± 170.9 days and that for all patients with 156.3 ± 163.2 days.

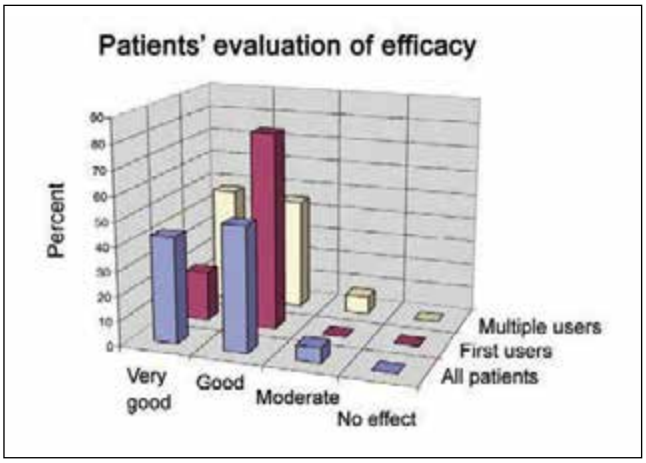
5. Efficacy and Tolerance

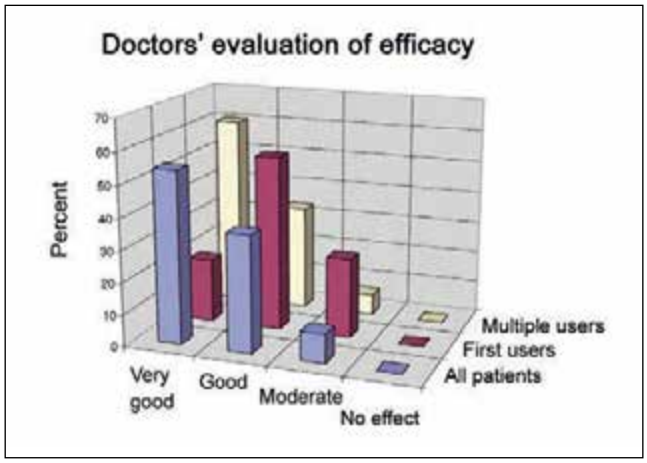
5.1 Evaluation of Efficacy by Doctor and Patient

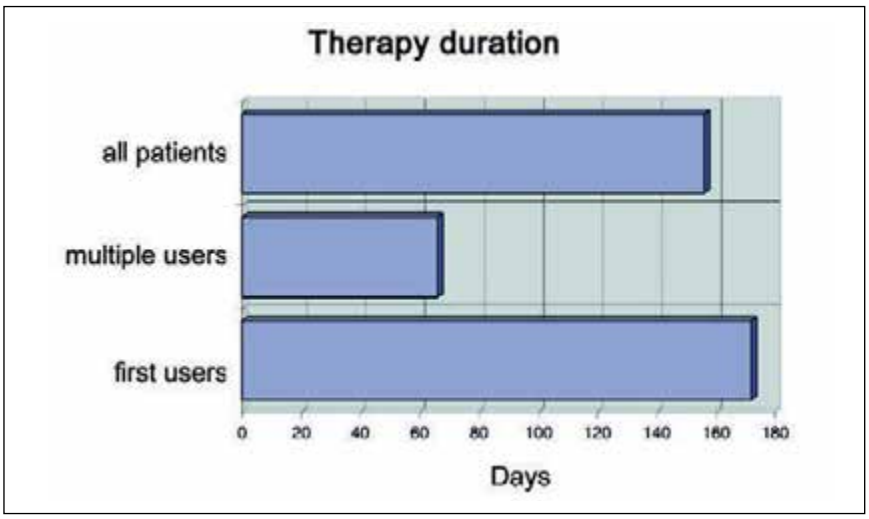
In a final assessment, doctors and patients were asked to evaluate efficacy and tolerance. Efficacy could be rated as "very good", "good", "moderate" or having "no effect". Further, doctors were asked to evaluate the patients' compliance, which also could be rated as "very good", "good", "moderate" or "poor".

The evaluation of efficacy showed that 43.3% of the patients rated efficacy as "very good", 50.6% as "good", whilst for 6.1%, the treatment's efficacy was "moderate". The result of the doctors' evaluation of efficacy was just as positive as that of the patients. The doctors rated efficacy as "very good" in 54.3% of the cases, as "good" in

Evaluation of Efficacy								
Patient group	**Patients' evaluation [%]**				**Doctors' evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	43.3	50.6	6.1	0	54.3	36.6	9.1	0
First user	20.0	80.0	0	0	20.0	55.0	25.0	0
Multiple user	47.5	45.4	7.1	0	60.3	33.3	6.4	0







36.6%, as “moderate” in 9.1%. No doctor and no patient evaluated the treatment as having “no effect”. In the adults’ group, efficacy tended to be rated better; there was a shift from “good” to “very good” in the evaluation.

Compliance (N = 153) was judged as “very good” in 83 and “good” in 63 patients by their doctors, hence 89.0% of all patients participating in the study were given a “good” or “very good” compliance rating. For seven patients, compliance was judged as being “moderate” and for no patient as being “poor”.

5.2 Evaluation of Tolerance by Doctor and Patient

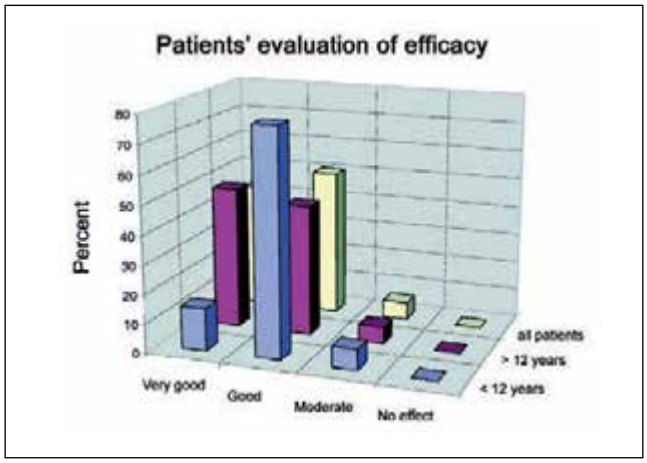
To conclude the examination, an evaluation of tolerance was submitted by doctors and patients, wherein tolerance could be rated as “very good”, “good”, “moderate” and “poor”. 55.5% of the patients and 64.6% of the doctors rated tolerance as “very good”, while 44.5% of the patients and 35.4% of the doctors attested “good” tolerance to SANUKEHL Coli. “Moderate” and “poor” tolerance was attested to the preparation in no case.

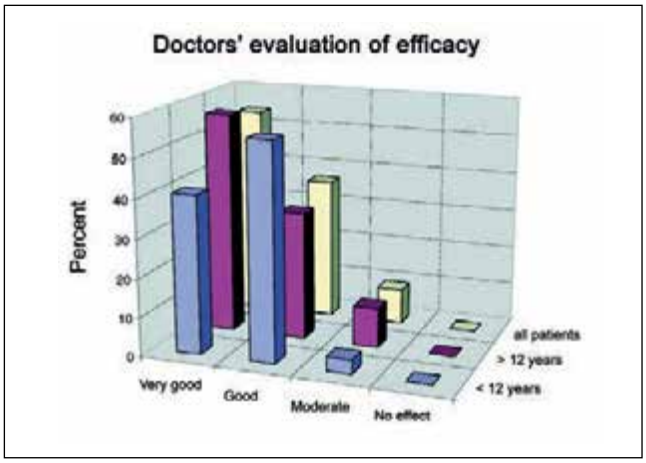
5.3 Side Effects and Discontinuation of the Therapy

No patient discontinued the therapy with SANUKEHL Coli, and no adverse drug reactions were reported.

After the application of 10 drops orally daily and 1 ml injected subcutaneously 1x weekly, one male patient of 33 years complained of perspiration one day after the parenteral application, which lasted for one day. Treatment with the test preparation was continued, and the complaints disappeared completely

Evaluation of Efficacy								
Patient group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	43.3	50.6	6.1	0	54.3	36.6	9.1	0
< 12 years	14.8	77.8	7.4	0	40.7	55.6	3.7	0
> 12 years	48.9	45.3	5.8	0	56.9	32.9	10.2	0





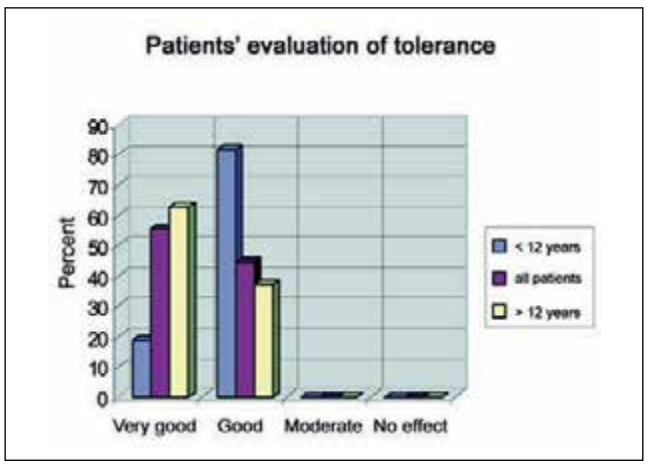
without further therapy. A 28-year-old female patient suffering from headache and diarrhea complained of nausea lasting for 10 minutes 30 minutes after taking in 10 drops. Another 60 years old female patient with pancreatic insufficiency complained of diarrhea 12 hours after the first intake of 8 drops, which disappeared after a one day tea break. In all of the three cases, a connection with the SANUKEHL Coli therapy was unlikely.

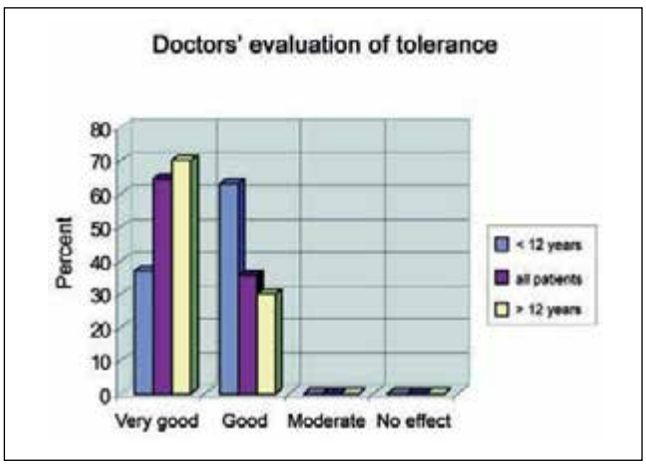
6. Summary

From February 1991 to May 2000, a total number of 164 patients was admitted to an observation study with the preparation series SANUKEHL Coli in the administration forms of drops and solution for injection in one internist practice and two general practices. The homeopathic test preparation SANUKEHL Coli consists exclusively of Escherichia coli e volumine cellulae in its 6th decimal dilution for the drops and its 7th decimal dilution for the solution for injection. The age of the patients varied between 3 and 98 years with an average of 43.0 years.

SANUKEHL Coli, in accordance with Isopathy, was used in a very wide area of application. The preferred application was independent of the age of the patients. The main indication areas stated were bronchitis, diarrhea, urinary tract infection, cystitis, and prostatitis. Ac-

Evaluation of Tolerance								
Patient group	**Patients' evaluation [%]**				**Doctors' evaluation [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	55.5	44.5	0	0	64.6	35.4	0	0
< 12 years	18.5	81.5	0	0	37.0	63.0	0	0
> 12 years	62.8	37.2	0	0	70.1	29.9	0	0





companying therapies were to be documented in the survey form.

Therapy duration for the children (< 12 years) with 105.3 ± 197.2 days on average was about 60 days shorter than that for the adult group with 164.9 ± 153.3 days. A differentiated reflection of the therapy periods offers a better picture. Thus, a therapy duration of up to 50 days is clearly predominant in the age group of under 12-year-olds (84% of all patients). Only 8% of the patients of this age group were treated for more than 150 days. Among the adults, the largest group with 38.2% of the patients was treated for more than 150 days.

Progress of the treatment was determined by means of a collection of medical findings both at the beginning and the conclusion of the therapy. 93.9% of the patients and 90.9% of the doctors rated efficacy as being “very good” and “good”. By “very good”, the first users tended to evaluate efficacy better than the multiple users. Neither doctors nor patients rated the therapeutic outcome as “no effect”.

Tolerance was rated exclusively as “very good” and “good” by both patients and doctors. Three short reactions such as perspiration, nausea and diarrhea were observed. No connection to SANUKEHL Coli could be established. The manifestations disappeared without further therapy. No study was discontinued and there were no undesired side effects. □

First published in the German language in the SANUM-Post magazine (79/2007)

SANUKEHL Preparations for the Excretion of Cell Wall Deficient Bacterial Forms

A Specific Extension of Isopathic Therapy

by Dr. Dr. Peter Schneider

This paper describes the origins and significance of cell wall deficient (CWD) forms of bacteria. With the help of SANUM therapy and particularly by taking account of SANUKEHL preparations, such forms can be regulated and excreted from the body. According to Professor Heine, this regulation mechanism can be explained by the "immunological support reaction". Regulation therapy using SANUKEHLS naturally presupposes a base substance susceptible to regulation, as described by Pischinger. This means that at least at the same time, but even better beforehand, the corresponding milieu therapy has to be implemented. It is true that the effect of the SANUKEHLS can be seen even without a prior milieu therapy but then far higher doses are required, as Peter Cornelius describes in his article "Therapeutic Experience with Haptens" which is also contained in this edition of the SANUM Post.

Origin of Cell Wall Deficient Bacterial Forms

Low developmental forms of bacteria are of great significance to the normal regulation of the warm-blooded organism. The background of this knowledge has been known for more than a hundred years and it was researched systematically during the time of the First World War by Günther Enderlein (Enderlein 1925). The fact that a healthy organism can regulate the environmental conditions in blood and tissue in this way means that there is a genuine symbiotic relationship between the microbes and their host (Braun-von-Gladiss 2000).

If the milieu becomes distorted in any way, the regulatory bacterial forms may develop into pathogenic 'germs', causing specific clinical symptoms of disease. However, these symptoms are usually only the expression of a healing reaction, with the help of which the organism is endeavouring to re-establish its symbiotic equilibrium. The laws governing this process, which from a clinical point of view need to be observed, have been summarised by the German physician Hans-Heinrich Reckeweg in the 6-phase table of homotoxicology (Reckeweg 1975).

As described in the article on the tubercular constitution in the SANUM-Post (Schneider 2000), cell wall deficient bacterial forms (called 'CWD' by Mattman 2001) may, however, also develop in non-physiological conditions. These conditions arise when an environment is created artificially in the organism, something which is otherwise only found with the most serious illnesses, such as cancer for instance. The main causes of these milieu distortions in humans are nowadays poor nutrition, indiscriminate administration of antibiotics and vaccines, the pollution of the external environment with toxins and other harmful substances (Jensen, 2000; Mattman, 1993, Reckeweg, 1975; Vithoulkas, 1998) and electrosmog, together with impediments to healing above all in the area of the teeth (heavy metal contamination, dead teeth). The organism cannot by itself eliminate cell wall deficient bacterial forms originating in the context of this milieu distortion, because natural regulation is also severely jeopardised by this severe "artificial disease".

This is where the SANUM therapy, above all with the help of the SANUKEHL preparations, offers the possibility of backing up the natural regulation at critical points and facilitating the excretion of the cell wall deficient bacterial forms.

According to research by Carl Spengler (Spengler 1911) on the transmission of micro-organisms to subsequent generations, an ultrasmall form of the syphilis pathogen can be found in the cells of the organism even when the organism has not been infected by the pathogen during its life. It was therefore assumed that the widespread nature of "congenital syphilis" was a relic of the early 16th century, when syphilis carried from America brought this acute infectious disease to the entire population on a pandemic scale. Anyone who did not fall prey to the disease at that time retained a 'residual toxicosis' which was handed down over the generations and according to Spengler is still present later as a "hereditary virus".

But in fact it simply means that cell wall deficient bacterial forms can be transmitted to the next generation extrachromosomally via the cytoplasm of the cells.

Characterisation of the Environmental Conditions in which Cell Wall Deficient Bacterial Forms Multiply

The pathologically distorted milieu, which is also called a "tubercular" milieu (Schneider, 2000), can be characterised with the following parameters in blood and tissue: rH_2-value (redox potential), pH (acid base balance) and r (electrolyte concentration). These parameters are measured in blood, saliva and urine with the help of Vincent's bioelectronics (BEV).

The redox potential provides information about the oxygen metabolism. In addition to balanced cell respiration, a balanced acid-base relationship and adequate excretion of toxins and metabolic products are necessary for the organs to function smoothly.

In particular a constantly raised redox potential ("redox rigidity" according to Vincent) means that intracellular respiration no longer functions adequately.

From the table of BEV values for blood, saliva and urine in physiological and pathological conditions and the energy output calculated from this, one can see that the significant characteristic of a heavily distorted milieu in blood and bodily tissues is a severe disruption of the energy flow within the organism (lower section of the Table, from Elmau, 1985).

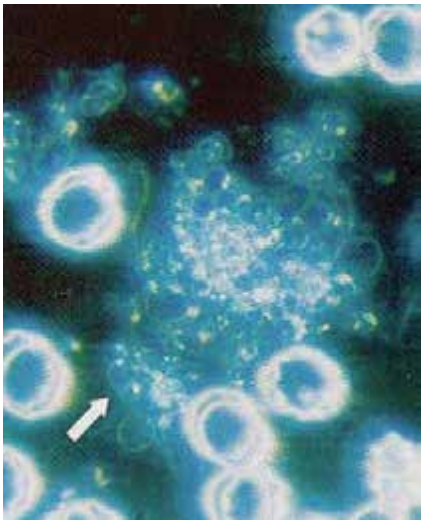
In pathologically distorted milieu conditions a lot of energy is stored in the blood (hence Enderlein's "tendency to congestion") but cannot be used by the metabolism. This means that metabolism and excretion in a chronically sick organism are no longer adequate and the patient, with an energy surplus, is regularly starved of energy.

The main work of Tibetan medicine "Gyü-shi" [Energy Theory], the book of the four Tantras of medicine, on the subject of the origin of cancer, states: *before a swelling becomes visible, the disease is preceded by a debilitation of the body's energy. This means: the stimulus attacks parts of the "vitalising energy body" – which surrounds a human being throughout his life – and destroys it. This can lead to individual organs being cut off from the life-flow.*

The pathologically distorted milieu of the blood, which is rich in energy, offers the cell wall deficient bacterial forms excellent breeding grounds even within the cells.

When these conditions are copied, the cell wall deficient bacterial forms can also be cultivated artificially in laboratory conditions (Mattman, 2001), whereby the culture medium must be stabilised with cardiac muscle extract, 15% inactivated horse serum and 3.5% NaCl. Unfortunately this method is not yet part of routine laboratory testing.

In the darkfield microscopy image of the blood cell wall deficient bacterial forms are identifiable as "mychites" (from Bleker, 1997).



Specific Antibody Formation and "Immunological Support Reaction"

It is primarily plasma cells which are involved in the formation of antibodies. They derive from B-lymphocytes and have a lifetime of about four days. In addition the preliminary stages of plasma cells, the small lymphocytes and immunoblasts, are also capable of forming and secreting antibodies. The development and mechanisms of the human immune systems are shown in Figure 2 (from E. Buddeke: "Outline of biochemistry", 1989).

Ideal values					
	pH	**rH_2**	**E**	**r**	**Output [µW/cm³]**
Blood	7.10	22	234	210	261
Saliva	6.50	22	270	140	521
Urine	6.80	24	312	30	3245

Strong pathological values					
	pH	**rH_2**	**E**	**r**	**Output [µW/cm³]**
Blood	7.50	25	300	121	744
Saliva	7.25	26	345	310	384
Urine	4.80	19	282	127	626

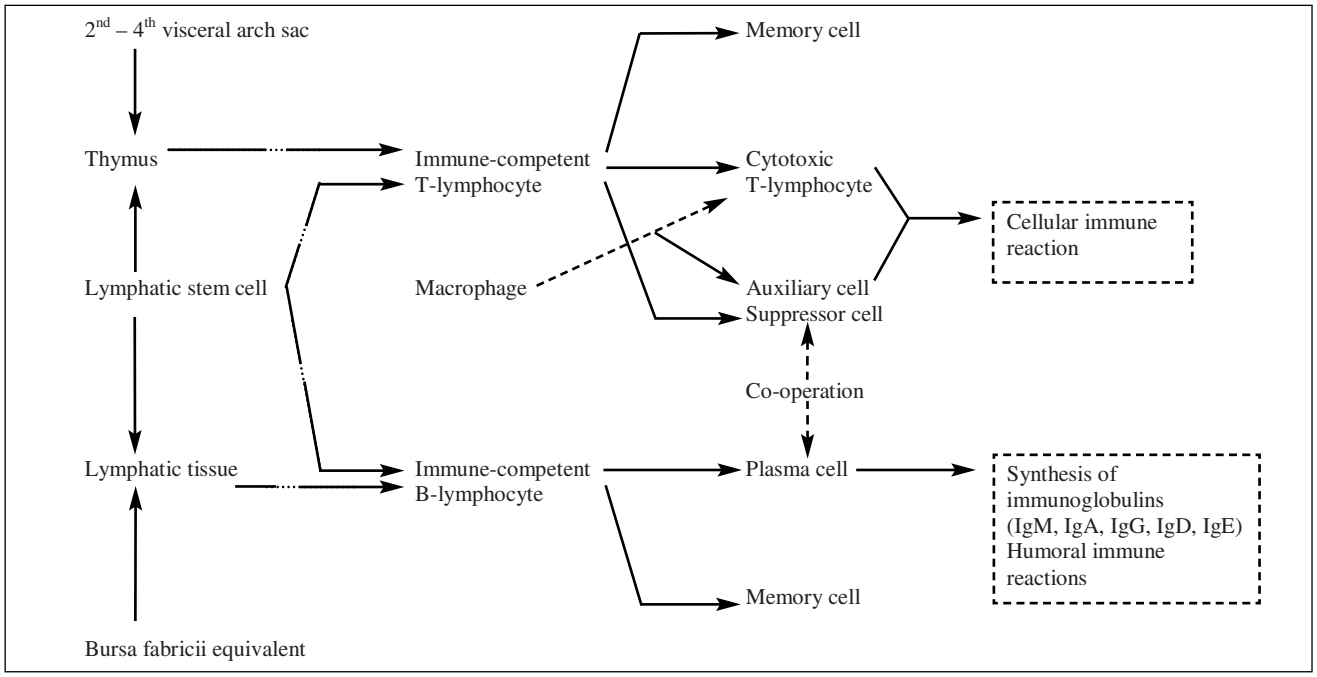


Figure 2: Development and mechanisms of the human immune system

The cell wall of bacteria contains antigen structures, which are recognised by the immune system and which help to maintain a balance between micro-organisms and the host.

To trigger an antigen-antibody reaction the antigens, which have reached the organism, have to meet B-lymphocytes, which carry the corresponding receptors on their cell surface. In addition to this direct route however, the antigens are as a rule bound, absorbed and processed by "accessory cells" of the immune system and then presented to the immune-competent cells.

Among the immune-competent cells there are in particular the antigen-specific T-lymphocytes. T-lymphocytes cannot themselves recognise any antigens directly; they are only stimulated when the antigen is presented to them by the accessory cells. Figure 3 shows a general diagram of cell co-operation when triggering antibody formation (from H. Ambrosius and W. Rudolph: "Outline of Immunobiology", 1990).

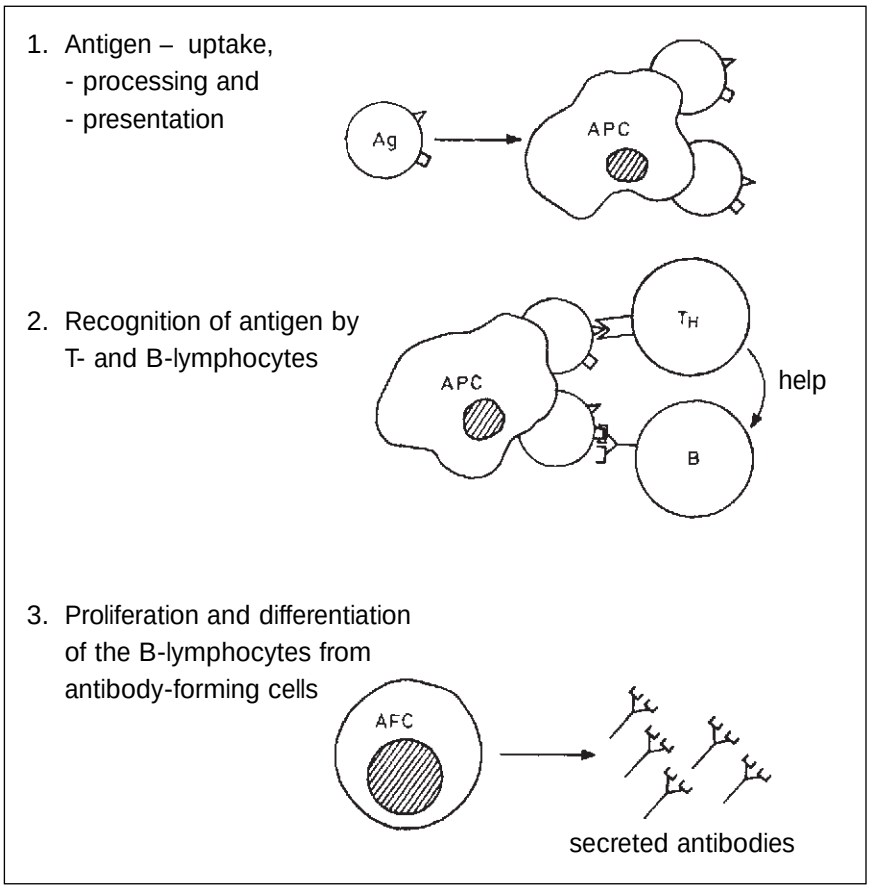


Figure 3: General diagram of cell co-operation when triggering antibody formation (according to ROITT et al. 1985).
APC=antigen-presenting cell, T_H=helper-T-lymphocyte, B=C-lymphocyte, AFC=antibody-forming cell.

For the excretion of the cell wall deficient forms of bacteria the SANUKEHL preparations have been well tried over a long period, including the therapy of infections with mycoplasms (Schneider, 1998; Werthmann 1999 and 2000). Since cell wall deficient bacterial forms have no cell wall in the strict sense of the word, but simply a thin membrane, the immunological mechanisms so far described only have a very limited effect in eliminating them. However, the cell wall deficient bacterial forms are evidently rendered recognisable to the immune system by the specific SANUKEHL preparations.

It has been known for a long time that information is exchanged between micro-organisms and their host in the form of polysaccharides, such as those present in the SANUKEHL preparations. An explanation of the biochemical mechanism is provided by Heine's so-called **"immunological support reaction"** (Pischinger, 1998), which is summarised in Figure 4.

The immunological support reaction is based on low dose antigen reactions, particularly with low to medium potency homeopathic medicines (D1 – D14). The non-toxic formulations contained in the SANUKEHL preparations, made from the cell walls of certain micro-organisms, are directly phagolysed and processed after ingestion and/or topical application by macrophages/monocytes and M-cells. Then short amino-acid sequences are returned to the macrophage surface as identifying features ("recognition motive") for lymphocytes and bound to the tissue tolerance (MHC) complex. TH3 cells – these are lymphocytes which are not yet immunologically pre-programmed – recognise these features and adopt them by binding them to their receptors. The lymphocytes "motivated" in this way migrate via the lymph vessels back into the nearest regional lymph nodes, where they multiply, according to the number of motives, into cell clones of regulatory lymphocytes (TH3), in order to then migrate into the whole body via the blood. Attracted chemotactically, the TH3 cells find the diseased area of tissue and the lymphocytes (TH1 and TH2) which are sustaining and fostering the local chronic inflammations there. Through contact with the specifically motivated TH3 cells the activity of the inflammation-promoting lymphocytes is reduced by the release of the cytokines TGF-ß, IL-4 and IL-10. At the same time the information contained in the SANUKEHL preparations about the cell wall deficient forms of the relevant bacteria to be eliminated is notified to these cells.

The immunological support reaction described by Heine in Pischinger's manual only works in the low dose range. With the help of homeopathic SANUKEHLS the immune system is specifically directed to eliminating cell wall deficient bacteria, against which an adequate immune reaction would not otherwise occur.

Basic Therapy

Finally let us describe a modified basic therapy according to Werthmann (Schneider, 2000) to regulate the tubercular milieu, which has been tried and tested in practice among adults for many years.

1. Ubichinon comp. (Heel) – CITROKEHL: combination injection i.m. once a week.
2. For two weeks: EXMYKEHL 3X Supp. evenings Monday – Friday, Saturday and Sunday 2 x 1 tablet FORTAKEHL 5X.
3. After those two weeks, for months: Monday – Friday: morning 1 tablet MUCOKEHL 5X, evening 1 tablet NIGERSAN 5X, Saturday and Sunday 2 x 1 tablet FORTAKEHL 5X.
4. From the beginning of the second week: alternating daily SANUKEHL Myc 6X and SANUKEHL Klebs 6X take 2 x 5 drops daily and rub in 1 x 5 drops.
5. From the third week onwards: 1 capsule UTILIN "S" (4X or 6X depending on constitution) 1 every 14 days.
6. Acid-base regulation with ALKALA N and SANUVIS.

The combination injection with Ubichinon, other carbonyl-group substances and CITROKEHL serves to activate the photons in the cells and improve cell respiration, EXYMKEHL and FORTAKEHL to rebuild the symbiosis in the intestine and MUCOKEHL and NIGERSAN to isopathically break down Enderlein's higher valence forms; UTILIN "S" serves as multipotent immune stimulation.

The SANUKEHL preparations stimulate the immune system to excrete specific cell wall deficient forms of pathogenic microorganisms. Where there is a tubercular constitution, SANUKEHL Myc and Klebs are used; where there is a known infection from other microorganisms (e.g. staphylococci or streptococci) the corresponding preparations (e.g. SANUKEHL Staph or Strep) are used.

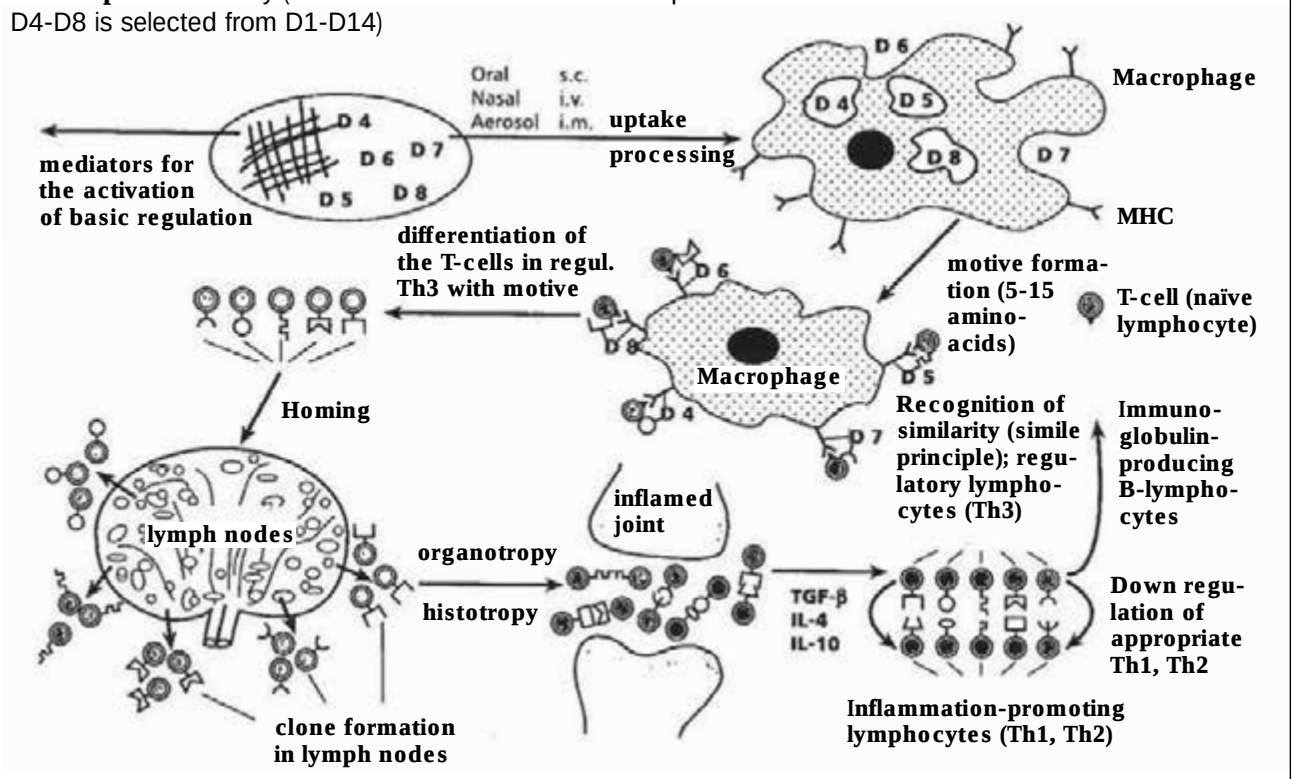


Figure 4: Immunological support reaction according to Pischinger (1998)

Since the information from the SANUKEHLS can also be transmitted via the skin cells, some of the drops should be applied to the skin, for example in the area of the elbows.

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First published in the German language in the SANUM-Post magazine (54/2001)

Statistical Evaluation of an Application Study with SANUKEHL Myc 6X Drops

by Dr. Reiner Heidl

1. Introduction

From April 1991 to April 2000, a total of 142 patients were admitted to an observation study with the preparation SANUKEHL Myc 6X drops in three medical practices, one specialising in internal medicine and two in general medicine. The homeopathic test preparation, SANUKEHL Myc, consists exclusively of the 6th decimal potency of Mycobacterium bovis (BCG) e volumine cellulae.

The aim of the observation study was to determine the actual application of the preparation and its tolerance under conditions of everyday practice. Further, knowledge concerning the acceptance of the product, especially with children, on the market should be gained.

In accordance with the structure of the study, exclusively descriptive statistical procedures were used. The application of inductive methods was not indicated. An "intention to treat" evaluation was carried out, i.e. all patients were considered who had received at least one dose of the remedy.

2. Participating Patients

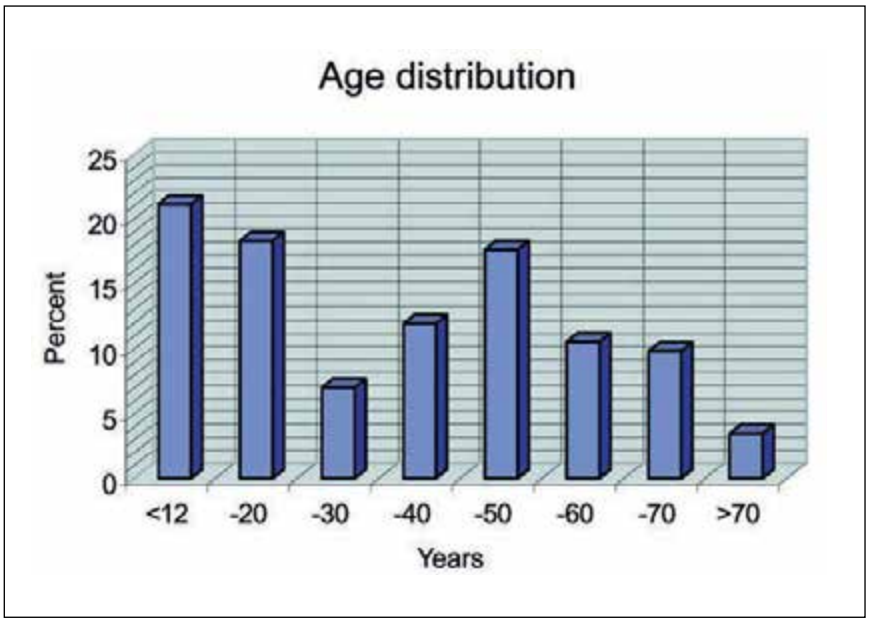
142 patients participated in the study, 70 males (49.3%) and 72 females (50.7%). The age of the patients varied between 5 and 82 years with an average age of 33.8 years and a standard deviation of 21.0 years. The age groups of under 12 years (21.1%), between 13 and 20 (18.3%) and between 41 and 50 (17.6%) comprised almost the same number of patients. The groups between 31 and 40 (12.0%), between 51 and 60 (10.6%) and between 61 and 70 (9.9%) were also of comparable sizes. Between 21 and 30 years old were 7.0% and over 70 years old 3.5% of the patients. The male patients with an average age of 37.5 ± 21.4 years were on average 7 years older than the female patients with 30.2 ± 19.9 years.

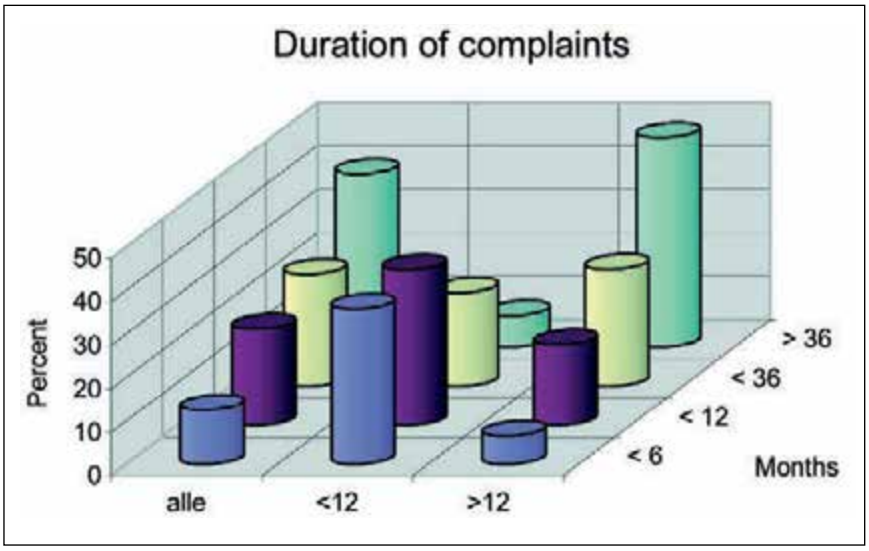
Height varied between 119 and 180 cm with an average height of 155.9 ± 20.0 cm and weight was between 19 and 93 kg with an average weight of 56.9 ± 20.9 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to prescription had to be recorded in the study protocol. It showed that SANUKEHL Myc 6X, according to Isopathy, is used in a very wide application range. Preferred application was independent of the patients' age. The main indication areas named were bronchitis, bronchial asthma and skin diseases such as dermatitis, psoriasis and lupus. Medical findings were recorded both before and after completion of the treatment. Any accompanying therapies were to be documented in a survey form.

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol for how long they had suffered the disease





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	12.5	35.7	6.5
< 12	22.1	35,7	18.5
< 36	25.7	21.4	26.9
> 36	39.7	7.1	48.1

or complaints. Time frames were given of less than six months, up to one year, up to three years and more than three years.

For only 12.5% of the patients, the complaints had been present for less than 6 months. For 22.1%, the complaints had been present for a period between six and 12 months, and for 25.7% for a period between one and three years. More than one third (39.7%) of all patients had suffered the complaints for more than 36 months. In the age group of under 12-year-olds, the duration of the complaints had shifted towards acute conditions. Thus, 35.7% of these patients had suffered the complaints for less than six months and between six and 12 months, but only 7.1% of the patients for more than three years. In the adults' group of over 12-year-olds, a chronic suffering period of more than 3 years was particularly pronounced with 48.1% of the patients.

Only 6.5% of the patients suffered from acute complaints with a duration of up to six months, 18.5% between six and 12 months, and 26.9% between one and three years.

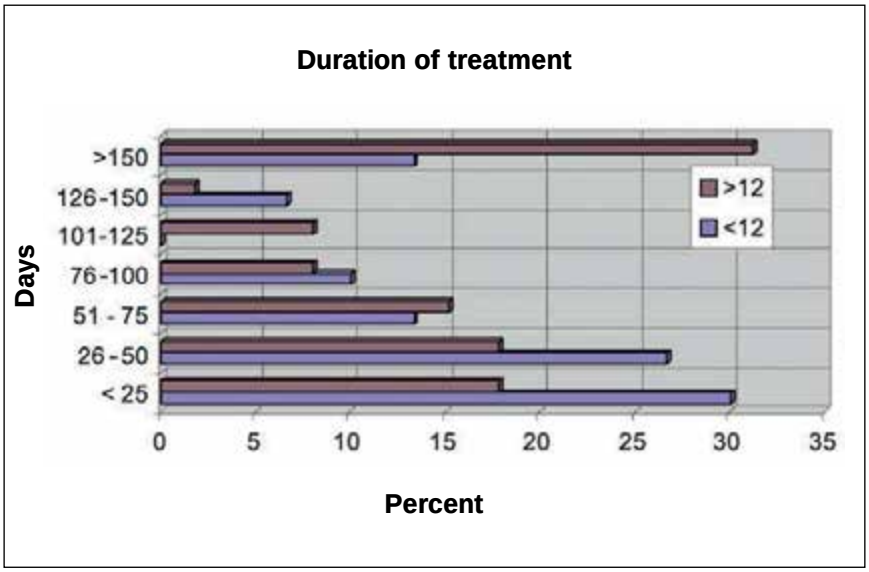
Of the 142 patients included in the study, only a 36-year old female patient had already been treated with SANUKEHL Myc 6X drops before.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

Corresponding to the nature of an application study, the doctors were not given a fixed schedule for the final examination. This final examination was carried out after a period of 5 to 368 days with an average of 127.1 ± 130.1 days.

Therapy duration for the children (< 12 years) was on average 81.4 days ± 102.1 days, and thus, approximately only half as long as that for the adults' group with 139.4 ± 133.4 days. The spread range in the age group of under 12-year-olds is due to three patients with 366 therapy days each. The differentiated



evaluation within specific therapy periods allows for a better picture. It reveals that amongst the under 12-year-olds, the therapy duration up to 50 days was clearly in the foreground (56.7% of all patients). Amongst the adults, the largest group was that of more than 150 therapy days with 31.3% of the patients.

3.2 Dosage

Dosage was prescribed according to the patient information leaflet:

Oral application:
For acute conditions 5-10 drops (every 12 to 24 hours); for chronic conditions 10 drops every other day.

External application:
Every 1-2 days 5-10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

122 patients took the drops orally and 74 patients were treated externally. Multiple counts were necessary, as 54 patients were treated both orally and externally. The following table states the medium dosage of the application forms. The drops are related to the daily oral intake or external application, respectively.

The recommended dosage was complied with. In the group of under 12-year-olds, the drops for oral and topical application were dosed according to age. The medium dosage in monotherapy was not significantly different from that in combination therapy. The dosage for external application in monotherapy was almost twice as high as in combination therapy.

4. Comparison with Former Therapy

Only one adult female patient had been treated with SANUKEHL Myc 6X drops in the past five years.

Therefore, a comparison between first-time and repeated users was not possible. By comparing efficacy and tolerance in both patient groups of first-time and repeated users, hints for a possible sensitisation towards

Dosage According to Administration Form (Total Population)			
	Medium dose	**Minimum dose**	**Maximum dose**
Drops (oral)	14.3 ± 6.5	3	30
Drops (topical)	7.2 ± 2.8	1	12

Dosage According to Administration Form (all Patients under 12 Years)			
	Medium dose	**Minimum dose**	**Maximum dose**
Drops (oral)	7.9 ± 2.1	5	10
Drops (topical)	4.9 ± 2.1	1	10
Dosage According to Administration Form (all Patients over 12 Years)			
	Medium dose	**Minimum dose**	**Maximum dose**
Drops (oral)	16.3 ± 6.1	5	30
Drops (topical)	8.0 ± 2.6	3	12

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	**Minimum dose**	**Maximum dose**	
Drops (oral)	14.9 ± 6.6	5	30	**Mono**
Drops (oral)	13.5 ± 6.2	5	20	**Combi**
Drops (topical)	10.0 ± 0	10	10	**Mono**
Drops (topical)	6.2 ± 2.6	1	12	**Combi**

the medically active ingredient could be identified. This patient as well as her doctor evaluated tolerance with “good“ for repeated application.

5. Efficacy and Tolerance

5.1 Evaluation of Efficacy by Doctor and Patient

In a final assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be rated as “very good”, “good”, “moderate” or as having “no effect”. The doctors were also requested to rate patient compliance as “very good”, “good”, “moderate” or “poor”.

Efficacy was rated as “very good” by 26.1% of the patients and as “good” by 63.4%, whilst 10.6% rated efficacy as “moderate”. The doctors’ evaluation was as positive as that of the patients. The doctors rated efficacy as “very good” for 37.3 % of the patients, as “good” for 54.9%, and as “moderate” for 7.7%. No doctor and no patient evaluated the treatment as having “no effect”. In the adults’ group, efficacy tended to be rated better; compared with the childrens’ group, there was a shift from “good” to “very good” in the evaluation.

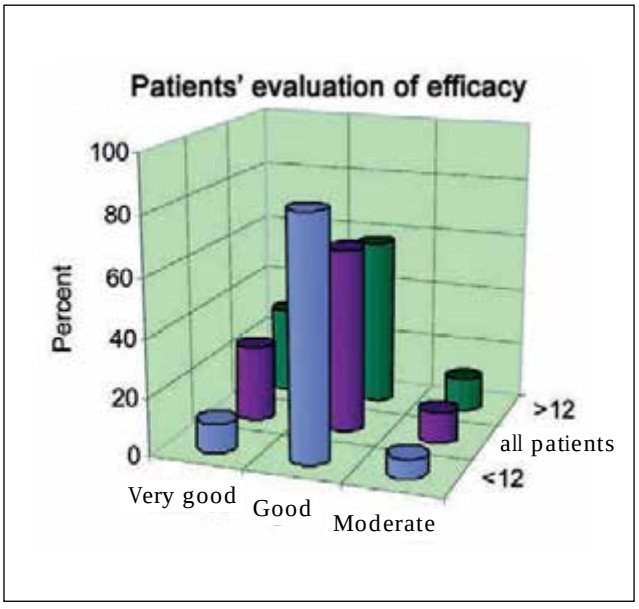
Compliance (N=140) was judged as “very good” for 42 patients and as “good” for 77 patients by their doctors. Thus, “good’” and “very good” compliance, respectively, was attested to 83.8% of the patients. For 21 patients, compliance was judged as being “moderate”, and for no patient as being “poor”.

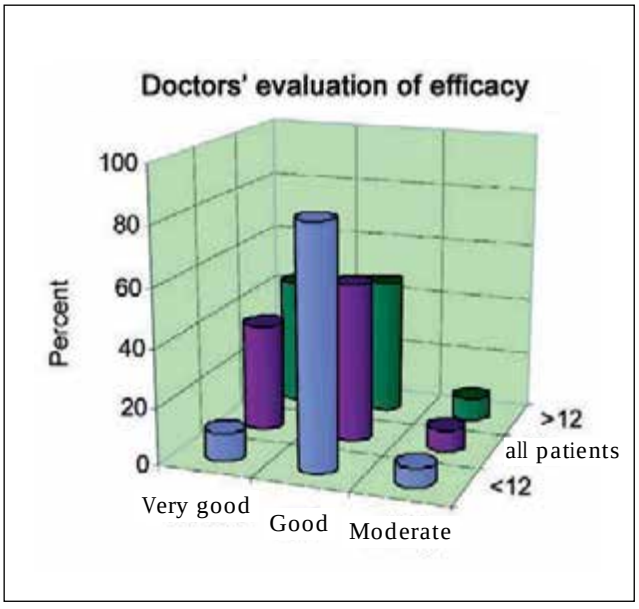
5.2 Evaluation of Tolerance by Doctor and Patient

To conclude the examination, an evaluation of tolerance was submitted by doctors and patients, wherein tolerance could be rated as “very good”, “good”, “moderate” and “poor”. 40.1% of the patients and 41.5% of the doctors rated tolerance as “very good”, while 57.7% of the patients and 54.2% of the doctors attested “good” tolerance to SANUKEHL Myc 6X. “Moderate” tolerance was stated by 2.1% of the patients and 4.2% of the doctors. “Poor” tolerance was attested in no case by both patients and doctors.

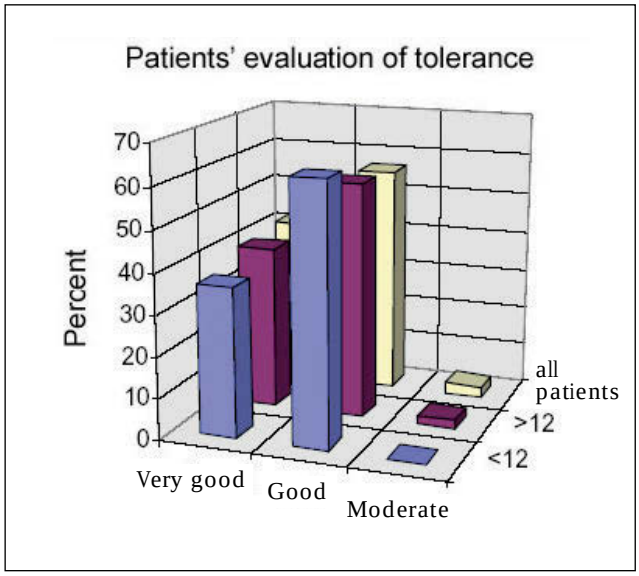
In the adults’ group of over 12-year-olds, patients evaluated tolerance in the ratings of “very good” and “good“ a little better than those of

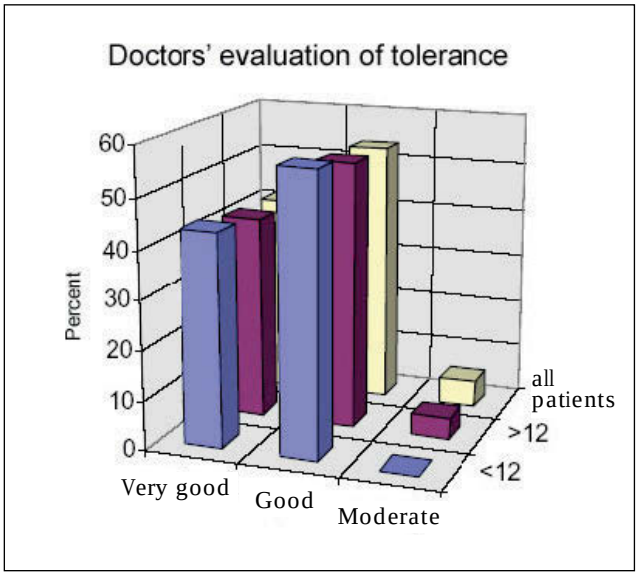
Evaluation of Efficacy								
Patient group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	26.1	63.4	10.6	0	37.3	54.9	7.7	0
< 12 years	10.0	83.3	6.7	0	10.0	83.3	6.7	0
> 12 years	30.4	58.0	11.6	0	44.6	47.3	8.0	0





Evaluation of Tolerance								
Patient Group	**Patients' Evaluation [%]**				**Doctors' Evaluation [%]**			
	Very Good	Good	Moderate	Poor	Very Good	Good	Moderate	Poor
All patients	40.1	57.7	2.1	0	41.5	54.2	4.2	0
< 12 Years	36.7	63.3	0	0	43.3	56.7	0	0
> 12 Years	41.1	56.3	2.7	0	41.1	53.6	5.4	0





the age group of under 12-year-olds. In the younger age group, patients and doctors rated tolerance as being "moderate" or "poor" in no case.

5.3 Side Effects and Discontinuation of the Therapy

No patient discontinued the therapy with SANUKEHL Myc 6X drops, and no adverse drug reactions were reported.

One 62 year old male patient with chronic cholecystitis complained of diarrhoea after having taken 10 drops 2x daily for one day, which disappeared after a tea pause of one day without any additional therapy. The treatment with the test preparation was continued. At the end, patient and physician rated tolerance as "good".

6. Summary

From April 1991 to April 2000, a total of 142 patients were admitted to an observation study with the preparation SANUKEHL Myc 6X drops in three medical practices, one specialising in internal medicine and two in general medicine. The homeopathic test preparation, SANUKEHL Myc, consists exclusively of the 6th decimal potency of Mycobacterium bovis (BCG) e volumine cellulae.

According to Isopathy, SANUKEHL Myc 6X was used in a very wide application range. Preferred application was independent of the patients' age.

The main indication areas named were bronchitis, bronchial asthma and skin diseases such as dermatitis, psoriasis and lupus. Any accompanying therapies were to be documented in a survey form.

Therapy duration for the children (< 12 years) was on average 81.4 days ± 102.1 days, and thus, approximately only half as long as that for the adults' group with 139.4 ± 133.4 days. The differentiated evaluation within specific therapy periods allows for a better picture. It reveals that amongst the under 12-year-olds, the therapy duration up to 50 days was clearly in the foreground (56.7% of all patients). Amongst the adults, the largest group was that of more than 150 therapy days with 31.3% of the patients.

122 patients took the drops orally and 74 patients were treated externally. Multiple counts were neces-

sary, as 54 patients were treated both orally and externally. Only one adult female patient had been treated with SANUKEHL Myc 6X drops in the past five years. Therefore, a comparison between first-time and repeated users was not possible.

Progress of the treatment was determined by means of a collection of medical findings both at the beginning and the conclusion of the therapy.

89.5% of the patients and 92.2% of the doctors rated efficacy of the treatment as “very good” and “good”. In the adults’ group, efficacy tended to be rated better; compared with the childrens’ group, there was a shift from “good” to “very good” in the evaluation. “Very good” and “good” compliance was attested to 83.8% of all patients included in the study.

40.1% of the patients and 41.5% of the doctors rated tolerance as “very good”, while 57.7% of the patients and 54.2% of the doctors attested “good” tolerance to SANUKEHL Myc 6X. “Moderate” tolerance was stated by 2.1% of the patients and 4.2% of the doctors. “Poor” tolerance was attested in no case by both patients and doctors.

One 62 year old male patient with chronic cholecystitis complained of diarrhoea after having taken 10 drops 2x daily for one day, which disappeared after a tea pause of one day without any additional therapy.

No patient discontinued the therapy, and there were no adverse events.

First published in the German language in the SANUM-Post magazine (93/2010)

Infection and Treatment of Chlamydia and Mycoplasma

by Dr. med. Konrad Werthmann, Austria

More and more infections are manifesting themselves with an indistinct and vague symptom picture that often resembles the beginning of a flu. These infections are not caused by pathogens that target specific organs, but rather they finally lead to chronic suffering. Very often the incorporation takes place via the digestive or the respiratory tract. I refer to chlamydia and mycoplasma infections.

These microorganisms are subject to "pleomorphism", which means that they are able to change their form subject to changes in their environment. They develop in order to be able to overcome the various defence mechanisms of the body. They multiply with the help of special intracellular bodies with consequent death of the cell, and then infect further cells after division.

Mycoplasma are cell wall deficient (CWD) bacteria and thus occur in variable forms. They show a low affinity to stains and are difficult to detect. It is only possible to prove their existence on a culture medium that is high in protein, like horse serum or splitting of urea. The most common types that are highly pathogenic to human beings are *M.hominis, M. urealyticum and M. pneumoniae*. The first ones are common commensals of the urogenital tract and facultatively pathogenic. They cause inflammation in the pelvic cavity, like postpartum fever or fever after abortion. It is likely that mycoplasma urealyticum (urea plasma) can cause prostatitis. Ureaplasma can be found in the serum in cases of urinary infections, but does not have any clinical relevance.

M. pneumoniae is mildly pathogenic and throughout the world transmission is only carried by humans. The transmission takes place in the form of droplet infection and can lead to atypical pneumonia or other respiratory complaints such as tracheobronchitis, pharyngitis and to otitis media. Known complications are meningoencephalitis, myocarditis or pericarditis as well as arthralgia and thrombocytopenia, the latter of which are difficult to treat. The mycoplasma are far too often not considered.

Chlamydia are immobile, belong to the coccoids and are pleomorphic bacteria. They can also change their form. It seems to be particularly important that they are obligate cell parasites, which only multiply in the cytoplasmic vacuoles of host cells using energy from cell enzymes.

Characteristic morphological stages are the formation of infectious elementary life-forms (diameter approx. 0.3 µm). These microorganisms are taken up by the host cell via endocytosis and will grow there via division in the space of a few hours into non-infectious reticular particles (diameter 1.0 µm). These are intraplasmic inclusions. After finishing the division phase, the reticular bodies form basic bodies, which can infect other cells after the host cell has ruptured. This shows that these organisms need intracellular space for their maturation process. After the host cell has been destroyed the process of infection starts again from the beginning.

Chlamydia pneumoniae causes chronic infections of the respiratory tract. It is especially noteworthy that the spread of the infection is particularly high in school children. What is also interesting is that chlamydia can also be found in arteriosclerotic plaques including those of the coronary arteries and are seen as a possible initiator of arterial changes.

Chlamydia psittaci can be found worldwide and is mainly distributed by parrots and pigeons. These are able to survive for a long time in bird's droppings, dust of feathers, street dust and secretions.

Chlamydia trachomatis exhibits several serovariants in varying pathogenicity. Serovariants (serovare) A-C cause trachoma. Serovariants D-K are the most common causative agents for non-gonorrhoeal urethritis and non-gonorrhoeal cervicitis, salpingitis, perihepatitis, epididymitis, inclusion conjunctivitis and neonatal pneumonia.

Several facts are very interesting. One is that human beings act as a pool for the causative agent and the infection is one of the "most common sexually transmitted ones". The elementary bodies are mainly situated extracellularly (0,2 – 0,4 µm) and are extremely infectious and metamorphose into the intracellular

reticular or initial bodies. The latter form intraplasmic inclusions within the host cell.

The pathogenicity of all the mentioned chlamydia and mycoplasma is strongly dependant on the "milieu". Especially under tubercular conditions, with severe change in the pH value, redoxpotential and conductivity of blood and tissues, it is very high. The earlier named pathogens can initiate diseases on various levels.

1.) A form of illness that is typical of a certain pathogen: this is a connection between disease and agent that is usually made by orthodox medical practitioners. An example would be the non-specific inflammation of the cervix or epididymis by Chlamydia trachomatis.

2.) As a result of a "leaky gut" and deficiency in IgA (auto-intoxication according to Reinstein) the pathogens or their corpuscles are able to cross the barrier of the intestinal mucosa and cause systemic reactions. The body then either reacts by producing antibodies or cannot fight the enemies as they do not possess a cell wall. By establishing an inflammatory reaction the body tries to fight and excrete the pathogens. Depending on the genetic predisposition of the individual or the genetic predisposition of certain organs, a variety of chronic diseases can be established in that way. At the top of the list, we find individual parts of the intestines are affected as well as associated glands like the pancreas and liver.

All pathogens and toxins that break through the intestinal barrier have to be transported to the **liver for detoxification**. As a practitioner you sometimes wonders why chronic diseases that would normally be slow in developing like slow developing cancers take on such a rapid course. Therefore individual serological parameters should be integrated into the programme of diagnosis, such as a complement fixation test (CFT) against chlamydia or a culture of relevant mycoplasma.

The proven therapy of chlamydia and mycoplasma infection mainly consists in treating the "milieu" in order to overcome a tubercular weakness (pyrexia of unknown origin (p.u.o.); elevated erythrocyte sedimentation rate (ESR); permanent immunological weakness: e.g. susceptibility to trivial infections).

First of all the intestinal mucosa including the Peyer's patches should be built up. In addition a dairy- and egg-free diet should be eaten for at least 4-6 weeks (Werthmann).

With this, the production of immunoglobulin A (IgA) and other antibodies will be enhanced. Otherwise the formation of antibodies slows down and convalescence is prolonged.

By taking alkalising substances such as ALKALA the acidic environment within the body can be changed rapidly and effectively. Therefore 1 measuring spoon of ALKALA N is prescribed to be taken in a glass of hot water .

One capsule of REBAS 6X is taken daily before supper. In addition a mixed injection containing NIGERSAN 5X and CITROKEHL 2ml (intramuscular) is given weekly. On the days where no injection is given, 2 tablets of CITROKEHL should be taken orally in the morning and at lunchtime.

To further enhance the immune system, SANUKEHL Pseu 6X drops are prescribed. 5 drops should be taken orally and 5 drops applied topically.

First published in the German language in the SANUM-Post magazine (51/2001)

The Sanum Preparation Sanukehl Brucel

Its Action Principle Brucella melitensis in Therapy

by Joachim Hartmann (Ph. D., Biology)

The gram-negative pleomorphic bacillus Brucella melitensis belongs to a genus of pathogens responsible for mostly chronic infectious diseases in man and animals. So-called "brucellosis" has three main variants:

1. Malte Fever

Pathogen: Brucella melitensis
Vectors: sheep, goats

2. Bang's Disease

Pathogen: Brucella abortus
Vector: cattle

3. Brucella suis

Pathogen: Brucella suis
Vector: pigs, hares, reindeer

Host specificity is not strict; almost all domestic and wild animals, guinea pigs and even birds can become infected with Brucellosis. Ultimately, all Brucella species are human and animal pathogens. This has led to a situation in bacterial nomenclature where only the species Brucella melitensis is listed, under which all the others are subsumed. Since Brucella species are bound to their host animals, they are considered obligate parasites under natural conditions. As an animal disease, they mainly induce abortions; the danger to humans comes from the pathogen's excretion in infected animals, which gets into their milk, feces, urine and sexual organ secretions. Humans become infected mainly through dealing with the host animals, e.g. assisting in abortions, slaughtering and meat processing (via the slightest of skin lesions). Another channel of transmission is via the digestive tract through the consumption of raw milk or milk products. Interestingly, Brucellosis also represents the most frequently caught infectious disease in laboratories that deal with microorganisms.

In humans, it leads to a local lymphogenic spreading of the pathogen and then to a generalized infection in the bacteriemic stage. The distinguishing feature of Brucellosis is a moderately high fever that recurs repeatedly over months and years (undulating fever). In its most severe form, a typhous clinical picture with long-term high fever can even be fatal. Other characteristics include organ manifestations due to granuloma and abscesses in the spleen and liver, as well as endocarditis, joint affections, etc. This manifold disease picture of chronic Brucellosis, which is not easy to recognize in its nonspecific subfebrile form, also encompasses neurological and psychological symptoms.

Brucella growth in vivo is typically intracellular in granulocytes and monocytes, and can also occur strongly pleomorphic in a cell wall deficient form – one reason for the long persistence of the pathogen after the symptoms have faded. In this form, the germs also escape the effects of antibiotic therapy and thus become foci for new fever attacks and organ manifestations.

As a gram-negative bacterium, Brucella melitensis has a very complexly structured lipo-polysaccharide cell wall. Serological investigations have isolated three defined polysaccharides from Brucella melitensis:

1. The so-called "native hapten"
2. Polysaccharide B
3. Cell-wall lipopolysaccharide

Bound up with the lipopolysaccharide structure are the classic antigens A and M described for Brucella, which have been identified as polysaccharide side-chains. Lipopolysaccharide from Brucella has been put into use for active immunization, in which the production of protective antibodies is induced but no thymus dependent immunological memory is generated, which would be necessary for any long-term defense against Brucella.

Polysaccharide B is a serologically inactive low-molecular-weight (ca. 5000 D) polysaccharide, a cyclic glucane such as also occurs in the bacterial species Rhizobium and Agrobacterium. It reacts neither with cattle serum nor with that of inoculated cows. It represents a classical hapten, which originates in the soluble cytoplasm of the bacterium.

The "native hapten" reacts with the serum of infected cattle, not with that of cattle which has been inoculated with weakened living germs of Brucella melitensis. It has been shown that it is identical with a side-chain of the cell-wall polysaccharide of Brucella with a smooth colony form, and consists of an unusual pentasaccharide polymer. It

is well suited for identifying infected animals in herds, by using the radial immune diffusion test, in which antibodies in animal blood lead to precipitation of the Brucella hapten.

The preparation SANUKEHL Brucel contains all the named polysaccharides, so that this agent has an immunizing effect, as well as the classical antigen and antibody binding effect of the haptens which qualify it as an intermediate agent for nosode therapy. Julian lists the following as positive diagnostic for the Brucella melitensis nosode:

1. Feverish condition with heavy perspiration during physical exertion and at night
2. Muscle and joint pains, primarily in the lower limbs
3. Anorexia, emaciation
4. Headaches, irritability, nervousness
5. Emotional lability, sleeplessness
6. Fainting spells, dizziness
7. Constipation: hard, dry stool
8. Herpes.

Improvement: warmth, especially in sun.
Worsening: long periods of exertion, warm room, sea breeze, dampness, storms.

Clinical Diagnostic Picture:

1. Malta fever, especially in the chronic stage
2. Myalgia
3. Subacute rheumatoid arthritis
4. Orchitis and Epididymitis
5. Neurasthenia. □

First published in the German language in the SANUM-Post magazine (42/1998)

Therapeutic Experience with Haptens

by Peter Cornelius, Germany

In the middle of the 1970's I had a visit from a businessman who wanted to show me some isolated hapten preparations which he intended to sell in Germany.

And so it was that I first learnt that haptens which have been isolated from pathogens and are polysaccharide in character can also be used therapeutically. However, he could not provide any clues as to the indications for which their use was to be recommended. He could only report that the remedy Haptenovacuna was prepared from a strain of corynebacteria which was cultivated in the damp environment of the nasal passages and got its name (vacuna = cave) because it was useful for the nasal sinuses. Furthermore, that his own psoriasis had been healed with Polipse (= polysaccharido de pseudomonas). Polipse is also attributed with an effect similar to cortisone without having the damaging side-effects typical of steroids. He had tried to have this effect of Polipse (which he had discovered to be positive on himself) tested by the University Dermatology Clinic in Hamburg in clinical trials. It never reached the trials stage as the costs of the fee demanded and samples required would have far exceeded his financial capabilities. And so then with the aid of remedy testing I began to determine in which cases the therapeutic use of these preparations would seem sensible. I want to report here on my current state of knowledge, made up mainly of my experiences and the study of Jan Klein's *Lehrbuch der Immunologie [Textbook of Immunology]*. I could not find any helpful insights into haptens in other books on immunology.

What are Haptens?

The concept "hapten" was introduced to immunology by Landsteiner in 1923. It is derived from the Greek word "haptein" which means to stick, as haptens stick to the carriers of antigenic features. These carriers which are linked to haptens are known as conjugated antigens. The molecular weight of a hapten should (according to Jan Klein) be less than 4000 Daltons; other authors suggest that it could be even less than 1000 Daltons, whilst J. Hartmann determines a molecular weight of approx. 5000 Daltons for the hapten deriving from Brucella melitensis (polysaccharide B).

Haptens have two bonding valencies. In conjugated antigens one of these valencies at a time is bonded with the carrier. According to Jan Klein, if conjugated antigens enter the body, the other valencies of their haptens can only be taken up by the receptors of B-cells (= BCR), the B-lymphocytes which originate from the equivalent of the bursa.

In contrast to the haptens, which in their isolated state do not have any antigenic features, the carrier molecules must have a minimum size of 4000 Daltons in order to develop antigenic features. Highly active antigens can reach sizes in excess of 100,000 Daltons. These carriers of antigenic features can only be bonded by the receptors of T-cells (= TCR), the T-lymphocytes which are formed by the thymus. According to Jan Klein, only when a conjugated antigen is bonded simultaneously by its carrier part to a TCR and by its hapten part to a BCR can the B-cell form and deliver the specific antibodies. If there are no haptens present, the free carriers are in fact also bonded by the TRCs, which causes them to react by inducing inflammation. However, bonding to the B-cells in this way is not possible and so the formation and release of antibodies cannot take place.

If haptens are not present, the second half of the immune response is therefore inevitably blocked and inflammations of this type cannot be stopped: they become chronic and – as it is hardly possible to discern an acute phase – are labelled as primarily chronic. Very different types of substances can act as haptens, e.g. lipids, lipoprotides, nucleic acids or polysaccharides. Haptens which are found in germs which induce illnesses are nearly always polysaccharides which are specific to the particular pathogens or groups of pathogens.

Meanwhile it became clear to me that Polipse as a hapten from the pathogen Pseudomonas aeruginosa (previously known as Pyocyaneus) bonds with the carriers from this pathogen and with other free antigens which have certain similarities. This means that by substituting haptens which clearly must somehow have gone astray, the free carriers are again changed back into conjugated antigens. As they do so, they can now bond again with BCRs and the release of antibodies which was

not possible before is enabled; or if no antibodies have been stored in the memory cells so far, their production is started.

The prompt effect, frequently experienced in a wide range of cases where haptens are used therapeutically, testifies to the fact that isolated carriers, each bonded to TCRs and thus to T-Lymphocytes, must have been present and were responsible for the inflammation. T-carrier complexes of that kind were also overcome in this manner, whereupon the inflammation, if it had been caused by these, could be stopped immediately by removing their primary cause.

These facts led me to label haptens being used therapeutically as **antigen absorbers**. Thus new therapeutic possibilities were opened up in the treatment with haptens for illnesses which depend on the presence of isolated carriers. In the case of the businessman, his psoriasis must have been being maintained by carriers from Pseudomonas or by other isolated antigens which could also bond with the Pseudomonas haptens and therefore could be cured with this hapten.

As in practice I have not met any further case of this disposition, I expect that such a situation occurs only infrequently, which is why a clinical study based on this question alone would probably have led to a disappointing result. Supposing that you had treated 1000 randomly selected psoriasis patients with Polipse and achieved a cure in three of them, you would surely not attach any statistical relevance to this 0.3 per cent and would therefore forget the trial. In fact the test would have shown that only in these three patients there was an indication for the use of Polipse, and that in case of an existing indication there was also 100% efficacy.

This raises the question of how isolated carriers can cause loads of this type. If we understand that polysaccharides, e.g. starch, are split by the enzymes in the digestive tract and that, if required, the glycogen in the muscles can be split into monosaccharides, it can be assumed that polysaccharide-like haptens from microbes can be destroyed by enzymes. Thus it is to be expected that microbial carriers can be released from infected material which reaches the digestive tract or develops there, even when the pathogens have been destroyed by heating the infected or contaminated food or by treatment with antibiotics.

In order to avoid destruction of therapeutically used haptens in the digestive tract, as far as possible they must therefore be administered parenterally, i.e. through intramuscular or subcutaneous injections. Hapten preparations in the form of drops probably have a better effect if they are rubbed in percutaneously (e.g. into the inside of the elbow) than when given orally, which exposes them to the digestive enzymes.

Through remedy testing it was possible to optimise accuracy in setting indications for the use of haptens. However, testing procedures such as electroacupuncture according to Voll (= EAV), kinesiology or even radiesthesia require individual talents. Up to now it has not been possible to record them scientifically and certainly they can only be partially learnt. An understanding of these methods cannot be expected of doctors who have only been trained in medical schools. However, these testing procedures cannot and do not have to be explained here, as extensive literature about them exists and it can be assumed that they are well-known in circles concerned with natural healing.

Thus from the purely scientific point of view, in clinical examinations the indication for the use of haptens can only be established through therapy trials. Only from an observed treatment result with a hapten as antigen absorber can the conclusion be reached later that the particular problems must have been caused by isolated carriers which were again bonded by the haptens which had been administered. One hapten can therefore function like a differential therapy tool which has no possible effect when indications are absent, i.e. when the problems are not caused by free carriers which can join to the given type of hapten. It therefore goes without saying that randomised double blind studies are of as little use in determining the effectiveness of haptens as if you wanted to test the germination of seeds by scattering them on a paved area. If in this case only three seeds in a thousand sprout, it does not mean that the germination rate is only three per thousand: instead it shows whereabouts enough humus had collected for the seeds to be able to germinate.

Thus there remains for the time being only the experience of obtaining findings about opportunities for the therapeutic use of haptens.

After a period of observation of approx. 25 years, during which I have used over 3000 ampoules of haptens, three main areas of indication have become apparent to me. These have to be looked at more

closely in the light of clear-cut examples, in order to find clues as to when hapten therapy can be tried out with a good chance of success.

A. Complementary, Post-antibiotic Treatment with Haptens when Problems Persist Although the Infections have Already been Overcome

Case 1

In July 1988 the father and son of family K. were taken ill with persistent diarrhoea. Examination of the faeces for pathogens showed that in both patients massive intestinal candidiasis were the likely cause. After antimycotic treatment with nystatin, the son soon recovered fully. The father, Mr E.K. (then 49 years of age) not only appeared not to be responding to this treatment, but he also started to have pain in the joints of the spinal column. A further course of treatment with amphotericin did not bring about any improvement. However examination of the faeces showed that the candida colonisation had for the most part disappeared. At this point he came to my practice. He received an injection of 0.1 mg candida haptens. This at once ended his problems, both of the intestine and of the spinal column.

Case 2

The tonsil abscess of a patient was treated by operation and administration of antibiotics. The tonsils had healed well, but the patient felt more shattered than before. Doubtless she had swallowed pus when the abscess had been incised. A few minutes after the injection of 0.1 mg streptococcus haptens her condition improved visibly, and a second injection of the same on the following day restored her completely.

Case 3

In September 1999 40-year-old Mrs C.S. came to see me. Six months earlier she had undergone surgery on her umbilical hernia. As a result of this operation she had contracted streptococcal septicaemia. It had been possible to control this with an intensive course of antibiotics, but since that time the patient had been suffering from constant pain in the intestines with frequent diarrhoea as defined by postantibiotic colitis.

After an injection of 0.1 mg streptococcus haptens, on the following day she had violent stomach pain which lasted for an hour; afterwards her problems were much reduced. Three days later she had a short episode of stomach pain with sickness. This finally brought Mrs C.S.'s problems to an end. This success shows that in this patient isolated carriers from streptococci must have been responsible for the persistent pain.

As everybody knows, similar conditions can also be caused by overgrowth of the intestinal flora with the multi-resistant germs of Clostridium difficile. In such cases a course of treatment with the nosode Clostridium difficile, which sometimes has to be supplemented by treatment with SANUKEHL Serra. The therapy is evidently able to stimulate the immune system so specifically that these pathogens are cut down to size.

Similarly, patients with problems which persisted after antibiotic treatment of staphylococcal infections had to be given staphylococcus haptens, coli haptens after antibiotic treatment of coli infections, and proteus haptens after proteus infections.

B. The Treatment of Non-infectious Pathogenic Alimentary Toxicoses

As there is no reason to accept that botulism is the only non-infectious pathogenic alimentary toxicosis, it has to be reckoned that problems can also be caused by taking in other pathogens orally, even if these had been destroyed by boiling or pasteurisation.

Case 4

On 4.7.1995 Mrs N.L. presented herself for the first time with an acute attack of rheumatism. I had already known her for a long time: at that time she was 33 years old. That morning she had woken up with completely stiff, painful finger and toe joints. Her whole hands and feet were red and thickly swollen with oedema.

On the previous day she had eaten poultry, which I presumed to have been contaminated with tuberculin. Just five minutes after she had received an injection of 0.1 mg BCG haptens, the swelling began to reduce significantly and her fingers were free of pain again. I assumed that the cause of this attack of rheumatism was contamination of the alimentary canal by tuberculin toxins, from which the carriers had been released in the digestive tract. For as long as I was still in contact with this patient, she never had this type of problem again. The assumption which had prompted me to try the treatment was afterwards confirmed by the good results of the treatment.

Case 5

On 6.3.1998 Mrs E.H. (then aged 73) asked me to make a home visit. She had suddenly been taken ill with nausea, sickness, diarrhoea and

such powerful dizziness that she could not stand up. Previously she had probably eaten some sheep's cheese imported from the Balkans. The injection of one ampoule of 0.1 mg brucella haptens brought this state of affairs to an end in five minutes, which leads me to conclude that this cheese was contaminated with Bang (brucella) antigens.

The observations described under **A** and **B** can perhaps only be explained by means of the hypotheses proposed above. It is possible that despite treatment with antimycotics or antibiotics (as in cases 1 to 3) antigens remained in the body, or that heat-resistant antigens entered the body (as in cases 4 and 5) from pathogens which exist in foods, even if the pathogens had been destroyed by pasteurisation or boiling. The carriers must have been released from such antigens, which were originally still conjugated, when they were destroyed by the action of enzymes on the haptens in the digestive tract. As these carriers are only bonded by the TCRs in the lymphoid tissue of the wall of the intestine without the B-cells being able to render them harmless, in the patients concerned the lost hapten has to be substituted as quickly as possible in order to enable the otherwise blocked second half of the natural immune defence by the B-lymphocytes to take place. This is the (probably only) way to prevent chronification of T-cell-mediated inflammation.

In cases 4 and 5 there were clearly enough specific memory cells in which the antibodies required were already held on standby. Therefore antibodies could immediately bond the TCR carrier complexes with the matching hapten doses and eliminate them. This also immediately stopped the inflammations which were caused by T-cells, because the primary cause was removed.

If antibodies and memory cells first have to be formed, the process will naturally take longer. In individual cases the body can react by raising its temperature in order to speed up this second half of the immune response.

If then the hapten dose results in a raised temperature, it is not a question of it being an undesirable side-effect; rather, it is a part of the desired and necessary main effect. On no account should such a fever be combated with an antipyreticum or hindered in any way, but rather it should be supported by supplying more heat.

C. Haptens as a Supplement to Nosode Therapy

Non-infectious pathogenic toxicoses, or those which are no longer infectious after treatment with an antibiotic and which have been caused by free carriers but cannot be eliminated immediately by a corresponding dose of haptens or overcome by enzymes, can turn into chronic conditions quickly or even slowly and gradually according to the disposition of the toxicosis concerned. This probably happens by the coupling of the TCR carrier complexes with endogenic elements of tissue which contain components which can serve the carriers involved as a hapten substitute. In this way the contact points with which they should link to their haptens are already occupied. Therefore these chronic conditions are no longer accessible to primary hapten therapy.

Together with pollutants coming from the environment, the TCR carrier complexes fixed in the mesenchyme and other residual toxicoses[1] in this way lead to what Dr Reinhard Voll called slackening of the mesenchyme. Many contaminations of this sort can be overcome by means of nosodes of the same type, and the homeopathisised pollutants concerned can be overcome with suitable complementary therapy.

By treating with nosodes and homeopathisised pollutants there may be initial aggravation. This happens because these poisons and pollutants which have been mobilised by the isopathic remedy must be channelled through the circulation before they can be excreted.

If such initial aggravations do not ease in two to three days, this mostly stems from the fact that the mobilised toxins are TCR carrier complexes in which are freed as a result of the specific fields of tension of the nosodes from the connection to endogenic tissue and thus are reactivated. In this way the illness which had drifted into the chronic state is brought back to the acute state. In these circumstances, exactly as in the beginning, the second half of the immune response – which is still blocked by the lack of suitable haptens – can only be set in motion again by the substitution of these very haptens. This is the most natural and the quickest – perhaps even the only way to true healing.

However, it is unfortunately not possible to count on the fact that every patient will take note of the circumstances of the aggravation caused by the haptens and will report on it.

[1] By 'residual toxicoses' we mean contamination which can result from a great variety of infections and which can in particular remain when spontaneous healing during the acute phase of the illness is prevented by remedies which inhibit inflammation and reduce fevers.

Therefore during a course of nosode treatment I carry out a control test before every injection; for when a hapten is needed, the combination of nosodes and complementary remedies which would be used in turn will not fit until this hapten has been given. As a rule, the treatment can then be continued the next day according to plan.

True healing is connected with the formation of memory cells, which get their name from the fact that they hold the method of production of the antibody specific to a particular antigen in their memory for use in the future.

Thus at the same time protection develops against new infection by the same pathogen which should not be underrated. In our time, when there is concern about the growing level of resistance in various pathogens against almost all antibiotic medicines, this could be of great importance.

Case 6

A man of approximately 30 years of age, who came into my practice in about 1983, was suffering from intense pain in the lumbar region of the vertebral column.

Following a CT scan he had been advised to have an operation on the intervertebral disc between the 4th and 5th lumbar vertebrae. Before he decided on the operation, he still wanted to try alternative therapy. The testing showed contamination with Tuberculinum avis, as well as Teucrium scorodonia.

Immediately after the first injection the pains in his spine became considerably worse. This was remedied with a dose of 0.1 mg BCG hapten a few hours later. In this case a similar injection of BCG hapten was necessary on each day following the nosode injection. After the tenth and last nosode dose the patient was completely free of problems and did not reconsider having an operation.

Without the hapten the course of nosode treatment in this patient could not have been completed. An operation could probably not have freed the patient from his pain, as it is impossible to remove bacterial toxins by rough mechanical means. But this can certainly be done isopathically, so to speak fine mechanically using the substance-specific high tension fields[2] of the toxins themselves, increased in stages by homeopathic dilution.

Let us look again at Case 6, which is an example of conformity with the natural law, such as could be observed over and over again in well over one hundred patients during a course of treatment with nosodes. The hypothesis discussed above is unequivocally confirmed by this conformity with the natural law namely,

[2] Since the high dilutions no longer contain any material substrate, beginners in homeopathy have to reconcile difficulties in the use of dilutions beyond the Loschmidt constant, with one's supposedly scientific view of the world. Because of this, homeopathy is unfortunately still completely rejected by many people. But we can find a comprehensible answer to this question if we consider that physics too is a science. The most important areas of research in this subject are: space, time, pressure, force, energy and performance and their interrelationship: pure phenomena whose existence nobody will dispute, although nobody has ever seen them under even the strongest electron microscope.

However all these concepts are familiar and absolutely obvious to us through their effects which we cannot ignore and which we can see all around us. Now the effects of homeopathic high dilutions have also been observed by many thousands of practitioners in many millions of cases throughout the world. All the same, some people (and they think that they are entitled to speak in the name of Science) consider that they are entitled to challenge these effects simply because they themselves have not yet made similar observations. But in any case they wouldn't be able to make any observations, as they hardly know the name of even one homeopathic remedy, let alone its remedy picture, and thus would not be in the position of ever being able to select the right remedy.

Let us now try, with the help of physics, to make clear the working mechanism of the diluted substance: We know that, in addition to the energies which are familiar to us such as gravity and magnetism, there must exist energies of hardly conceivable power, especially in the realm of atoms. If you tried to rotate a large object in the same way as an electron rotates around the nucleus of an atom, it would inevitably burst long before even an appreciable fraction of it had reached a speed of that magnitude.

The splitting of the double helix of ribo-nucleic acid which is a necessary part of cell division is also an enormously dynamic process. The spiral chains of genes unwind and then after the doubling rewind themselves with unimaginable speed.

But there are also energies which hold together molecules of the same type, so that liquids form round drops; over a period of time even solid matter of the same type can pass through a whole mass of rock and form a crystal in one place.

Such energies are described as "surface tension" or "coherence". They can act in a similar way to a field of tension between two condenser plates: we know that when the distance between the plates is doubled, the tension and thus also the voltage is doubled.

It is known that the negatively charged parts of raindrops collect on the upper surface of the drop. Here, as they fall, they are torn off into tiny droplets and remain opposite the now positively charged main drops which fall faster. As the distance between the negatively charged cloud of small drops from the positively charged cloud of large drops increases, enormous electrical fields build up and discharge by means of lightning and thunder.

From the observed effects of homeopathic high potencies it can be concluded that in the process of potentisation similar high tension fields are built up which are specific to the relevant substances.

Thus with every stage of potentisation of the D potencies, the distance between the particles will increase and therefore their tensions will also increase 2.15 times; in the C potencies they increase 4.64 times at every stage, and in the L potencies 36.84 times. You can imagine the energies which are released as being like unbreakable rubber bands which become increasingly thinner as the distance between the particles becomes greater, yet their tractive force increases at every stage.

Think of a magnetic field which surrounds a piece of magnetised iron and is specifically attracted most strongly to iron but also slightly attracted to metals which are apparently close to iron such as cobalt, nickel and manganese. So, too, diluted remedies appear to have the strongest effect on things which are similar to them (i.e. isopathic). However, they still have an effect on diseases which are similar in their symptoms to the effect picture of the substances used. In this way the homeopathic effects become comprehensible.

that aggravations which can occur after the administration of any isopathic remedy and did in fact occur in this case, are brought about by the high tension fields of the isopathic remedies which are specific to the substances in question.

These aggravations can be explained by the fact that toxins of the same kind (which in chronic illnesses require nosodes and consist of microbial carriers) are torn by the remedial high tension fields from these camouflaging bonds to endogenic substrates and thus are remobilised. Through this mobilisation they re-enter the circulation, which then results in the type of initial aggravations described.

If aggravations of the type described in Case 6 do not ease in two days, this means that the TCR carrier complexes which have been set in motion again in this way cannot be eliminated simply with the help of the complementary remedy. But they can often bond astoundingly quickly with the help of the corresponding haptens, exactly as would have been possible in the beginning before they could fixate, and thus be grasped by the B-cells. This is the quickest way to defeat them.

However, as now comprehensible, this defeat has not yet been possible in the phase preceding the mobilisation of the TCR carrier complexes.

It is possible for the conditions described in **A** and **B**, which turn out to be acute inflammation caused by the T-cells, to change slowly into chronic inflammation as described in **C**.

Therefore it can happen that in transitory phases like this, in which only one part of the toxins is fixed and another part is still circulating, a hapten must first be administered (as in A and B) in order to eliminate the still free TCR carrier complexes. However, since some of these TCR carrier complexes have already settled on the endogenic substrates, it is also necessary in the end to give additional treatment with the corresponding nosodes, possibly requiring repeated intermediate doses of the corresponding haptens.

The observed effects shed new light upon the etiology of primarily chronic and auto-aggressive illnesses. If TCR complexes have arisen with free carriers without a suitable hapten being present, it is conceivable that replacement structures similar to haptens must be found so that a complete immune response becomes possible.

Experience leads us to expect that a whole range of antigens have structures like this, e.g. in the substance of the articular cartilage.

As already mentioned above, nucleic acids - among other things - can take over the function of haptens. Since it is possible to find antibodies against nucleic acids in autoaggressive conditions such as systemic Lupus erythematodes, it would appear that they are being also used by some carrier types as a replacement for their missing haptens. In these cases, if the B-cells want to eliminate the antigens concerned, they have to grasp the endogenic structures which are replacing haptens. If such autoaggressive conditions have occurred and if healing is to be possible, then one has to look not only for the nosodes of the obliterating carriers but also nosodes containing the autoantibodies which have formed.

The B-cells have a primary immunotolerance towards endogenic substrates. Initially, therefore, antibodies against those tissue components which are bonded to TCR carrier complexes are suppressed. Nevertheless the cause of the inflammation which starts from these complexes remains. Therefore this type of inflammation is known as primarily chronic. But if suitable haptens are administered immediately at the beginning of the treatment, the positive reaction to treatment of this type of illness shows that this condition very probably also began with an acute condition and therefore only became chronic later.

When dealing with carrier TCR complexes from pathogen types which as a rule only cause reactive arthritis, these can apparently also be overcome or secreted spontanously. Possibly because these find enough substances as a replacement for haptens which are not so specifically endogenic that the antibodies needed for their defeat must be autoaggressive, or because they can be released as enzymes, whether by endogenic enzymes or those supplied by remedies such as Bromelain, pancreatic enzymes or Serrapeptase. In general it is not possible to rely on the possibility that so-called reactive arthritis is overcome spontaneously. That is to say, many patients with reactive arthritis have to be given the nosodes of the corresponding pathogen types. Because of the nosodes, inflammations of this type also begin to ease, whereas in other people they would only appear as reactive, since they disappear without any form of treatment. If, on the other hand, free carriers of pathogenic mycobacteria or streptococci are responsible for the development of inflammations, their TCR carrier complexes appear to remain invulnerable to the immune system without the missing haptens being substituted over a long period of

time, and for this reason they are not classed as only reactive.

Dr Nieper reported that in MS patients the medullary sheathes of the nerve fibres could be protected from auto-aggression by reconstructing the physiological electric potential by means of treatment with the neuro-transmitter "2 amino ethanol phosphate" (= Phosetamin® and Calcium-EAP®). If his hypothesis is confirmed, it would appear that the electrical potential available in the healthy state of the tissue involved is essential for the ability of the B-cells to recognise substances as endogenic. Thus perhaps a certain perceptive ability, which – like an electronic key no longer works when the battery has run down – is responsible for this recognition.

That would mean that auto-aggression could only take place if the natural electric potential has broken down[3], whilst at the same time TCR carrier complexes are also present which are bonded to endogenic structures as a replacement for their lost hapten.

In this way the origin of auto-aggression diseases can easily be understood. In laboratory diagnosis one would look predominantly for antibodies or determine antibody titres. However, the lack of haptens hinders that very production of antibodies or even makes it impossible. Thus in practice one cannot record contamination with isolated carriers using these investigation methods. As the replacement haptens favoured by the TCR carrier complexes are mainly found in the mesenchyme, they are also bonded there and are therefore unable to circulate any further. Therefore searching in the blood, which is the main substance investigated by laboratories, is futile, and it becomes clear why the causes of such illnesses have remained in the dark until now.

The nosode testing developed by Dr Voll was the first to shed some light on this darkness. The claim which he first formulated as his working hypothesis, that many chronic diseases can be explained as contamination by the very same toxins which are at the root of the nosodes found in testing to be the source material, is borne out to such a degree by the observed effects of complementary hapten therapy that it may be regarded as proven.

In this way the therapeutic combination of nosodes and haptens opens up for the first time the possibility of a truly causal therapy of rheumatic illnesses, since – so far as chronic inflammations caused by T-cells are concerned – it attacks the primary causes of these conditions.

If progressive rheumatologists should ever aim for causal therapy in their specialist field, there is no getting round the use of haptens which must frequently be combined with nosodes. Having said that, they find themselves in an almost hopeless dilemma, since up to now their treatment plan has been almost exclusively based on immunosuppressive drugs.

Since causal treatment with haptens and nosodes can only be effective in conjunction with a functioning immune system, it cannot be used at the same time as non-steroidal anti-rheumatic drugs, steroids or the even harsher immuno-suppressive cystostatics.

And so this solves the puzzle of the origin of inflammations caused by T-cells; the T-lymphocytes suddenly send out inflammatory mediators not because they have become crazy for no apparent reason, but because they are bonded to a toxic carrier whose destruction will be accelerated with the help of the known inflammatory reaction.

SANUKEHL - preparations from the company SANUM-Kehlbeck

The company SANUM-Kehlbeck GmbH & co. KG, Hasseler Steinweg 9, D-27318 Hoya/Germany, produces haptens which are marketed under the trademark "SANUKEHL". The products are offered in 1 ml ampoules and 10 ml dropper bottles in 5X, 6X and 7X potencies and are registered in several countries. All code numbers given for the unit dose packs and test packs refer to the catalogue of the Staufen-Pharma.

The following 13 hapten preparations are available:

1. Hapten from Pseudomonas aeruginosa (= SANUKEHL Pseu, corresponding to the Argentinian preparation Polipse)

The hapten from *Pseudomonas aeruginosa* works as an antigen absorber to complement the corresponding nosode Bacterium pyocyaneus (unit dose pack F3). The hapten has a somewhat broader spectrum than the nosode, and it even seemed to me that it could be used with viral nosodes as an antigen absorber. Here however it could actually be a matter of reversing immune suppression caused by hydrocortisone. In vitro tests by Kunze and Hartmann suggest this, for not infrequently patients with chronic virus illnesses have previously been treated with steroids.

[3] Pollutants which conduct electricity or permanent electrical voltages between tooth fillings could perhaps be responsible for this breakdown, possibly also strong irritation caused by electrosmog or the influence of geopathic fields.

So it can happen that the Pseudomonas hapten, e.g in the SPS (swine fever serum) nosode, unit dose pack F39, must be administered alternately with single injections of the nosode which together with a complementary remedy is required in increasing dilutions.

To be sure, assurance is given again and again that the swine fever virus cannot be passed to humans; nevertheless in numerous cases swine fever serum contamination can be found. Dr Voll reports that he himself has been through a full-blown, extremely unpleasant swine fever serum infection. For the most part contaminations like this can be explained only as non-infectious alimentary pathogenic toxicoses; they are almost always to be found in chronically inflammatory intestinal diseases, often too in stomatitis and spastic bronchitis. An overlying swine fever serum contamination must also be taken into consideration as the fundamental disease in chronic eczemas if they begin to weep.

Case 7

In 1976 G.K. – then 11 years of age was brought to me with recurrent uveitis. My tests showed that he too required the SPS nosode. However, my control tests before each injection showed that treatment with this nosode could only be carried out successfully with two intermediate injections of 0.1 mg Pseudomonas hapten (Argentina), which made me think, as described above, that this hapten was also effective in virus diseases. However, the patient had previously been treated intensively with cortisone in a children's hospital. Therefore the trials by Kunze and Hartmann named above, which give evidence that immune suppression caused by hydrocortisone can be reversed by the Pseudomonas hapten, appeared to explain the need to give G.K. one ampoule of this hapten twice between each of the nosode injections.

2. Hapten from bovine Mycobacterium tuberculosis (= SANUKEHL Myc, corresponding to the Argentinian BCG hapten)

The hapten from bovine *Mycobacterium tuberculosis Typus bovinum* fits all tuberculin nosodes: Tuberculinum (= T. humanum, unit dose pack E3); Tuberculocidinum Klebs (unit dose pack E5); Tuberculinum avis (unit dose pack E7); Tuberculinum bovinum (unit dose pack E8); Endometritis tuberculosa (unit dose pack K12) and tuberculosis of the bladder (unit dose pack M8).

Tuberculin contaminations are not only found in diseases of the joints, as described in Case 4 and Case 6, but can be found in practically all the organs. Even in patients with acute hearing loss, I mostly found tuberculin contamination. (See also the article about the tuberculin constitution in SANUM-Post No. 51, p.4).

As only immediate treatment has any chance of success in people affected, in my view this hapten belongs in the emergency kit.

3. Hapten from Streptococcus haemolyticus (= SANUKEHL Strep, corresponding to the Argentinian Estreptohapten)

The hapten from Streptococcus haemolyticus fits all streptococcal nosodes: Streptococcinum (unit dose pack A5), staphylo-streptococcinum (unit dose pack A28), Streptococcus viridans (unit dose pack A29), Streptococcus haemolyticus (unit dose pack A30), Scarlatinum (unit dose pack F2) and Nosode Parulis (Streptococcus mucosus) (previously unit dose pack Z34).

In many rheumatic diseases, contamination with streptococci is involved as part of the cause. Testing must be done to determine whether treatment should be carried out with one of the named nosodes. If this is the case, enough ampoules of streptococci haptens should be held ready so that if necessary drastic aggravations can be brought under control.

With all complaints which arise or persist after streptococcal infections which have been treated with antibiotics, it is necessary to consider contamination with Clostridium difficile and the application of this hapten.

4. Hapten from Staphylococcus aureus (= SANUKEHL Staph, corresponding to the Argentinian Estafil hapten)

The following nosodes fit the haptens from *Staphylococcus aureus*: Staphylococcinum (unit dose pack A4), Staphylococcus aureus (unit dose pack A26) and Staphylo-streptococcinum (unit dose pack A28),

5. Hapten from Candida albicans (SANUKEHL Cand, corresponding to the Argentinian Candida hapten)

The hapten from the yeast *Candida albicans* fits the nosode Monilia albicans (unit dose pack N20) and also most other fungal nosodes, such as the nosode of mycotic fluoride (unit dose pack K18), the aspergilli: Aspergillus niger (trial pack 144), Aspergillus fumigatus (trial pack 168) and Aspergillus ochraceus (trial pack 187), - perhaps one would also consider apurge with Aflatoxin (unit dose pack A37) - Geotrichum candidum (trial pack 170), Mycosis oris

(trial pack 62), Sporotrix Schenkii (trial pack 178), Malassezia furfur (trial pack 180) and Torulopsis glabratis (trial pack 146).

Only the fungal nosode Trichophytosis requires its own hapten (SANUKEHL Trich).

Furthermore I experienced that in the case of Mrs E.H. (Case 5) the administration of 7 amp. SANUKEHL Cand 5X immediately remedied drastic aggravation of aches and pain in the sacral region which occured after the administration of Ustilago maydis 30X. Even if this is a one-off observation, it can be taken as a possibility that the fungal antigens of Ustilaginaceae can also be pathogenic for humans and that the carriers isolated from their antigens can also bond to the Candida albicans hapten. Contamination with Ustilaginaceae can perhaps be caused by the consumption of pork or poultry (possibly in the case of Mrs E.H. by turkey steaks), as these animals are frequently fed on maize. Corn blight is common in all maize-growing areas.

Take care if unexpected pains in the spine and other joints begin during the course of a series of injections with fungal nosodes! Not only the TCRcarrier complexes of mycobacteria and streptococci but also the fungal antigen complexes mobilised during treatment will happily attack articular cartilage.

The progress of the illness described in Case 1 might lead us to suppose that the carriers of pathogenic fungi are not only mobilised by means of a course of treatment with nosodes but also in acute fungal infections can be freed by antimycotic therapy. In such cases Candida haptens should be administered. Antiphlogistics will only hinder healing in this case and can turn an acute condition into a chronic one.

6. Hapten from Trichophyton verrucosum (= SANUKEHL Trich)

The hapten from the fungus Trichophyton verrucosum is the hapten which fits the Trichophytosis nosode (unit dose pack N14). Time and again this nosode could only be proven after preliminary treatment with the hapten, from which one might conclude that it is not a rare thing for a mixture of acute and chronic disease to apparently be able to continue over a long period in trichophytoses.

7. Hapten from Proteus vulgaris (= SANUKEHL Prot, corresponding to the Argentinian Proteus hapten)

The hapten from the bacterium *Proteus vulgaris* fits the Bacterium Proteus nosode (unit dose pack B2) which, as it happens, can also only be proven after preliminary treatment with this hapten. However, it must frequently be administered repeatedly after each individual dose of the nosode. Many a chronic Proteus cystitis which has resisted the efforts of specialist urologists for many years has been healed in this way. Unfortunately often 2 ampoules each of 0.1 mg of Proteus hapten were necessary for this. SANUKEHL Prot ampoules are marketed in a 7X potency and further studies still have to prove which dosages must be applied to achieve similar results.

According to more recent findings SANUKEHL Prot has also proved its worth in the treatment of an infection with Helicobactor pylori (see the SANUKEHL article in SANUM-Post No. 43, p. 2).

8. Hapten from Propionibacterium acnes (= SANUKEHL Acne, corresponding with the Argentinian Haptenovacuna)

The hapten from the bacterium *Propionibacterium acnes* matches the nosode Corynebacterium anaerobium, which was previously sold as KUF series no. Z 49 and is now available as unit dose pack A38.[4]

It can be used as an antigen absorber for all chronic irritations in the damp environment of the airways, and for example also for the different influenza nosodes. Naturally it can also be considered for the Acne nosode (unit dose pack N17) , but could be of particular interest for the treatment of Acne fulminans which is not affected by any treatment with antibiotics.

9. Hapten from Brucella melitensis (= SANUKEHL Brucel, corresponding to the Argentinian Brucel hapten)

The hapten from the bacterium *Brucella melitensis* complements a treatment with the Brucella melitense nosode, Malta fever (brucellosis) (unit dose pack F34) or the brucella nosode (unit dose pack F5).

It is not necessary to travel to Malta to become contaminated with *Brucella melitensis*. Brucella contaminations can apparently be acquired by consuming imported milk products, particularly from sheep's or goats' cheese. The mostly chronic catarrh problems must then be relieved with the corresponding nosode, whereby an intermediate dose of the hapten from *Brucella melitensis* will be required as an antigen absorber. In

[4] See also my comments on the Corynebacterium anaerobium nosode and Propionibacterium acnes in my book "Nosoden und Begleittherapie" [Nosodes and complementary therapy], 3rd edition, p.68 f.

acute contamination with brucella, gastrointestinal pains as in Case 5 can be the main symptom; they can be relieved quickly by an immediate dose of Brucella hapten, even without a *Brucella* nosode always being required afterwards.

My experiences relate here to the Argentinian ampoules, which contain 0.1 mg of Brucella hapten (Argentina). It cannot be said yet how many ampoules of the SANUKEHL preparation Brucel 6X will be needed in order to achieve comparable results.

According to more recent experiences SANUKEHL Brucel has also proved itself in the treatment of borelliosis (see also the SANUKEHL article in SANUM-Post No. 43, p. 2).

10. Hapten from Klebsiella pneumaoniae (= SANUKEHL Klebs)

The hapten from *Klebsiella pneumaoniae* fits the Klebsiella pneumoniae nosode (trial pack 53), as well as the nosodes *Haemophilus influenzae* and *Haemophilus influenzae* serotype B (trial packs 113 and 114). Although this hapten is available in ampoules only as 6X, the required balance of toxins mobilised by the nosode can generally be achieved with three to ten ampoules.

11. Hapten from Escherichia coli (= SANUKEHL Coli, corresponding to the Argentinian Coli hapten)

The hapten from *Escherichia coli* matches the Bacterium coli nosodes (unit dose pack B1) and verotoxin-producing Escherichia (trial pack 192).

In particular one should think of this hapten if problems arise with the intestine and bladder after treatment with antibiotics, but also during a course of treatment with the *Bacterium coli* nosode – as already described in Case 1 and in the section on fungal nosodes which could be counted as of the rheumatic type. At the present time ampoules of this hapten are also only available in Europe in 7X dilution.

12. Hapten from Salmonella enteritidis (= SANUKEHL Salm)

The Bacterium Gärtner nosode (unit dose pack B50) corresponds with this hapten. As expected, this hapten from *Salmonella enteritidis* also fits the other salmonella nosodes: Typhinum nosode (unit dose pack B3), Samonella TP nosode (unit dose pack B31) and Salmonella typhimurium nosode (trial pack 135).

This hapten may also be required after a blind course of antibiotic treatment, administered as a precaution against nosocomial (hospital-borne) infections, like the following hapten from Serratia marcescens.

Although this hapten is available in ampoules only in 6X dilution, the required balance of mobilised toxins can generally be achieved with three to ten ampoules.

13. Hapten from Serratia marcescens (= SANUKEHL Serra)

In my provings the hapten from *Serratia marcescens* has occurred in the nosodes Sarcina ventriculi (trial pack 84), nosode Yersinia enterocolitica (trial pack 91) and the clostridridium nosodes: botulism nosode (unit dose pack B8), tetanus nosode (unit dose pack DA4), Clostridium difficile nosode (trial pack 21), Clostridium paraputrificum nosode (trial pack 22), Blostridium cadaveris nosode (trial pack 123), Clostridium innocuum nosode (trial pack 124) and Clostridium tertium nosode (trial pack 125). It is to be expected that it could also be used for the Enterococcinum nosode (unit dose pack B19).

Serratia types are found particularly frequently in hospitalism as pathogens. It is already emerging that SANUKEHL Serra is useful in very many nosocomial illnesses.

That means that in many patients who are discharged from hospitals in which antibiotics have been administered to them, with or without indications, problems could arise afterwards which refer back to residual toxicoses after nosocomial infections. Such problems can often be treated satisfactorily with this hapten (naturally, if applicable, also with another hapten corresponding to the contamination). This should in fact be done before such problems have deteriorated to the point where they become chronic and then require nosodes. In this age of contagious immuno-deficiency and therapeutic immune suppression, also hospital doctors ought to investigate whether the *serratia* hapten could not already be of great importance in hospitals for the treatment of hospitalism.

The haptens from *Salmonella enteriditis*, *Serratia* and *Klebsiella pneumoniae* have not yet been made available to me from Argentina; my observations regarding these haptens are therefore not so comprehensive.

Apart from the nosodes indicated for the individual haptens, in contaminations which can be purged with a pyrogenium (unit dose packs A1, A15, A16, A18, A19, A20 and A32 and the Pyrocoxinum produced by the Archea company) all the individual haptens may be required as anti-

gen absorbers, since when flesh decays a great variety of microbes can be involved in the process.

As stated above, my experiences are based predominantly on the hapten preparations which are stored in a concentration of 0.1 mg per ml, that is in the concentration of a 4X dilution. On the grounds of theoretical law on medications, the SANUKEHL preparations may only be sold in 5X, 6X or 7X potencies. According to my experiences, often several ampoules are required in order to achieve comparable results, which on the other hand facilitates a matching of the dose and combination to the individual needs of each patient during the testing.

Possibly extensive percutaneous use of SANUKEHL preparations will also be suitable: these are available in 10 ml drop solutions in 6X dilution.

In addition, of course, there may be all sorts of possible effects in all these preparations, also in 6X or 7X dilutions and higher, which I have not yet already recognised, which could possibly be quite unrelated to the ideas presented here. Such ideas are presented in the article "SANUKEHL-Präparate zur Ausleitung zellwandfreier Bakterienformen" *[SANUKEHL preparations for the Excretion of Cell Wall Deficient Bacterial Forms]* which is also to be found in the previous edition of SANUM-Post.

As regards the use of *Brucella* haptens as antigen absorbers in the treatment of *Brucella* contamination as described, I have also received reports that in Argentina an Interferon-inducing effect of this hapten has been observed, in particular in a combination with the hapten from Pseudomonas (SANUKEHL Pseu).

Meanwhile it has been proved by R. Kunze and J. Hartmann in in vitro tests with SANUKEHL Pseu (= Polipse) that there is a significant increase of tumour necrosis factor – α and Interleukin 1 ß, – 6 and – 10, whereby there was also asubstantial increase in the factors which stimulates granulocyte/monocyte colonies.

Such effects could also already be observed with higher homeopathic potencies, in contrast to those described above, whilst my points come from the fact that the effects of the haptens as antigen absorbers are not of a homeopathic nature but follow stoechiometric laws - that is, each free carrier molecule needs its hapten molecule.

Another preparation made from tumour cells is also available. This could perhaps be a possibility for an intermediate dose for degeneration nosodes. The few tests that I was able to do with this preparation do not however allow me to draw any conclusions: the effects in this area are certainly much harder to ascertain. It is certain that much of interest can still be expected in future research into haptens as therapy.

Peter Cornelius, Germany □

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First published in the German language in the SANUM-Post magazine (54/2001)

Statistical Evaluation of an Application Study with SANUKEHL Staph D6 (6X) Drops

by Dr. Reiner Heidl

1. Introduction

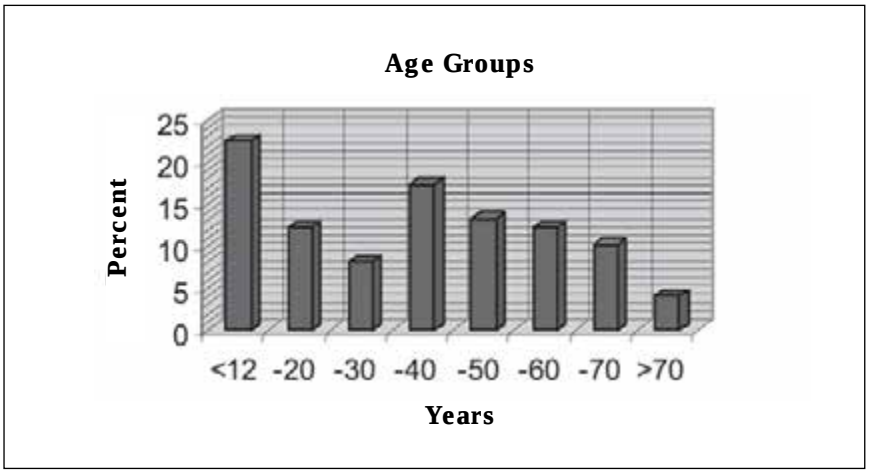
A total number of 98 patients in three medical practices, one specializing in internal medicine and two in general medicine, participated between August 1992 and May 2001 in an application study with the preparation SANUKEHL Staph D6 drops. The homeopathic test preparation, SANUKEHL Staph, consists exclusively of Staphylococcus aureus e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients were included in the study who had at least received one dosage of the medicament.

2. Participating Patients

98 patients participated in the study, comprising of 44 men (44.9%) and 53 women (54.1%), the age of one patient was unknown. The age of the patients varied between 5 and 91 years, with an average age of 35.3 and a standard deviation of 21.5. The largest group were patients under 12 years (22.4%). The age groups between 13 and 20 as well as between 51 and 60 were the same size (both 12.2%). 13.3% of patients were between 41 and 50 years old. The second largest group were patients between 31 and 40 years (17.3%). Only 8.2% were between 21 and 30, 10.2% between 61 and 70, 4.2% were over 70 years old. In the age structure, the men with an average age of 37.9 ± 23.0 were on average 4 years older than the women with 33.2 ± 20.0 years.



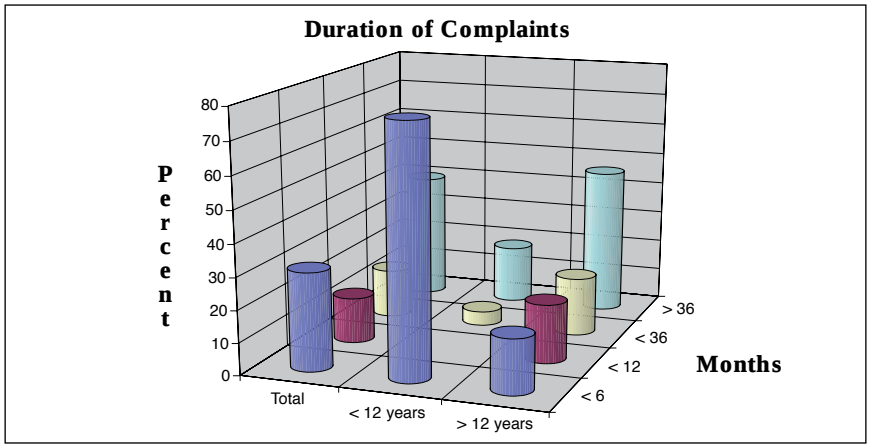
Height varied between 110 and 180 cm, with an average height of 158.5 cm ± 19,0 cm. Weight varied between 14 and 99 kg with an average weight of 60.4 kg ± 22.1 kg.

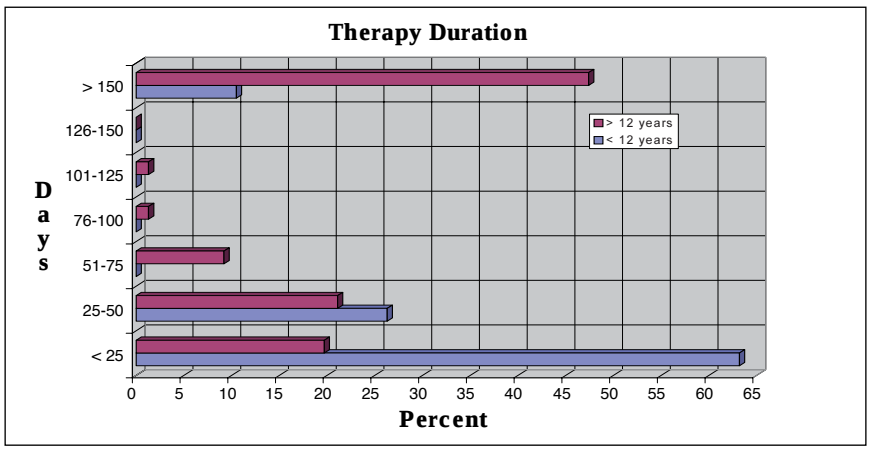
2.1 Diagnoses and Secondary Diseases

The diagnoses leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Staph, according to Isopathy, is used in a very wide applicational range. The preferred application was independent of the patient's age. The main indications were tonsillitis, otitis media, sinusitis as well as recurrent infections of the urinary tract and enteritis. A thorough diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure for chronic diseases, the patients were asked in the study protocol how long they had endured the disease or complaints. Time-frames were given of less than six months, up to one year, up to three years and more than three years. 30.6% of the patients had suffered complaints for less than six months, two groups of approximately the same size with 14.3% and 15.3% between six and 12 months and one and three years respectively. 39.8% suffered more than 36 months. The existence of the complaints was shifted more in the direction of acute conditions in the patients under 12. 77.3% of these patients suffered for less than six months and only 18.2% for a period of over three years. In the adult group of patients over the age of 12, the proportion of patients with a period of complaints over 36 months was especially pronounced at 46.1%. Only 17.1% suffered from acute complaints with a duration of up to

Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	30.6	77.3	17.1
<12	14.3	0	18.4
< 36	15.3	4.5	18.4
> 36	39.8	18.2	46.1





6 months, whilst the share of patients with complaints of between six and 12 months and one and three years was the same with 18.4%. All 98 patients included in the study had been treated with Sanukehl Staph D6 drops for the first time.

3. Dosage

3.1 Consultation Times, Therapy Duration

According to the nature of an application study, the physician was not given a preset time-limit for the final patient assessment. This final examination was conducted after a period of 11 to 396 days, with an average value of 160.1 days ± 157.2 days.

Amongst the children (< 12 years) the therapy lasted 58.5 days ± 105.6 days, approx. two thirds shorter than in the adult group with 186.4 days ±157.3 days. The scattering range in the group under 12 years was caused by two patients with 365 and 366 days respectively. If the two 'fugitives' were to be ignored, this would make a compact result of 22.4 ± 8.7 therapy days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the age group of the children below 12 years, the primary therapy duration up to 25 days (63.2 % of all patients) was clearly in the foreground.

Amongst the adults, the largest groups were those with 47.4% with more than 150 therapy days and 21.1% with a therapy duration between 25 and 50 days.

3.2 Dosage

The dosage was set as follows, according to the patient package insert:
Oral application: for acute conditions: 5 –10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day.

Topical application: Every 1 - 2 days, 5 - 10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

58 patients took the drops orally and 58 topically. Multiple counts were necessary as 18 patients took the drops orally as well as topically. The medium dosage based on the form of application is shown in the following table. The drops are based on the daily oral and topical application.

The recommended dosages were taken. In the group of patients under the age of 12, the drops for oral and topical application were dosed according to age. The medium dosage for topical application in monotherapy was almost twice as large as in the combination therapy. The medium dose of oral intake was higher in combination therapy than in monotherapy.

4. Comparison to Previous Therapy

All 98 patients included in this study had not previously been treated with SANUKEHL Staph D6 drops. For this reason a comparison between first and repeated application was not possible. By a comparison of efficacy and tolerance in both patient groups of first-time application users and repeated application users it would have been possible to evaluate a possible sensitisation towards the active ingredient.

Total Population			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	13.7 ± 6.2	6	20
Drops for topical application	8.8 ± 2.2	4	10

All Patients under 12 Years			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	7.9 ± 1.7	6	10
Drops for topical application	6.0 ± 2.2	4	10

All Patients under 12 Years			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	16.7 ± 5.5	6	20
Drops for topical application	9.2 ± 1.8	5	10

5. Evaluation of Efficacy

5.1 Evaluation of Efficacy by Physician and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance as above with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 42.3% of the patients thought efficacy to be "very good" and 44.3% "good", whilst only 10.3% assessed the evaluation with "moderate" and 3.1% stated "no effect". The results of the physicians' evaluation for efficacy was similarly positive as that of the patients. The physicians evaluated efficacy in 48.5% of the cases as "very good", 40.2% as "good", 10.3% as moderate and 1.0% as "no effect". The evaluation by physicians and patients alike was according to tendency better in the adults' group. However, in the children's group the assessments were exclusively "very good" and "good".

Compliance (N = 97) was assessed by the physicians to be "very good" for 45 patients and "good" for 37 patients, hence 83.7% of all patients participating in the study were given a "good" or "very good" compliance rating. 15 patients were given a "moderate" compliance rating and no patients were evaluated as "non-compliant".

5.2 Evaluation of Tolerance by Physician and Patient

An evaluation of tolerance was submitted by the physicians and patients at the conclusion of the study, whereby an assessment of "very good", "good", "moderate" and "poor" could be chosen. 62.9% of patients and 59.8% of physicians rated the tolerance to be "very good", whilst 33.0% of patients and 39.2% of physicians gave SANUKEHL Staph a "good" tolerance rating. 4.1% of the patients and 1.0% of the physicians rated it "moderate". No case was assessed as "poor" with the patients and physicians alike.

In the children's group under 12 years, the patients rated the tolerance with "very good" and "good" and thus a little better than the age group over 12 years. In the younger age group, the assessment shifted a little more from "good" to "very good", and additionally in this age group no case was assessed with "moderate" and "poor".

5.3 Side Effects and Termination of Therapy

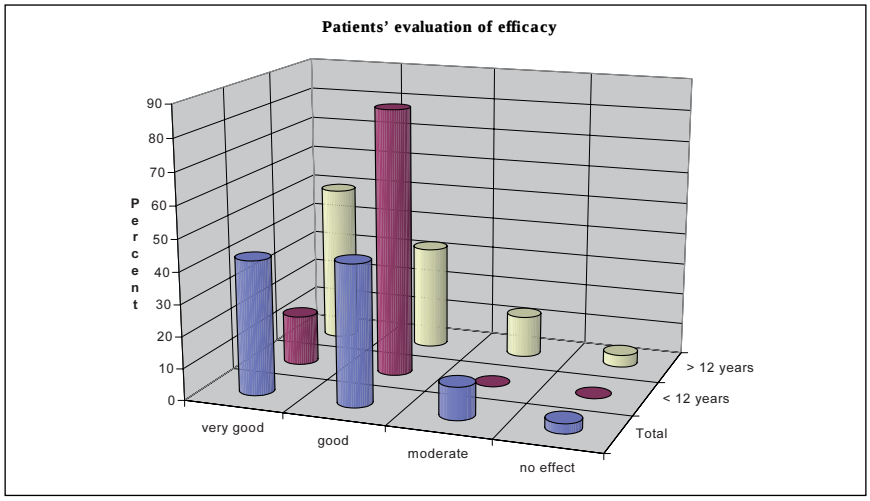
No patient discontinued the therapy with SANUKEHL Staph and no side effects were reported.

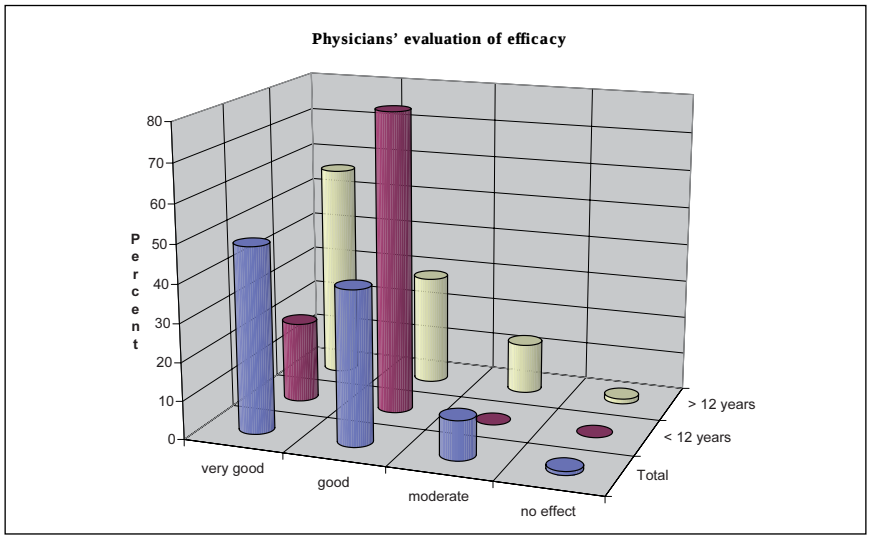
6. Summary

A total number of 98 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between August 1992 and February 2001 in an application study with the preparation SANUKEHL Staph D6 drops.

Monotherapy / Combination Therapy (Total Population)				
	Average dose	Minimum dose	Maximum dose	
Drops for oral intake	13.1 ± 6.3	6	20	Monotherapy
Drops for oral intake	15.0 ± 5.7	6	20	Comb. therapy
Drops for topical application	10.0 ± 0.3	8	10	Monotherapy
Drops for topical application	6.1 ± 2.1	4	10	Comb. therapy

Evaluation of Efficacy								
Patients group	Patients' evaluation [%]				Physicians' evaluation [%]			
	Very good (%)	Good (%)	Moderate (%)	No effect (%)	Very good (%)	Good (%)	Moderate (%)	No effect (%)
All patients	42.3	44.3	10.3	3.1	48.5	40.2	10.3	1.0
< 12 years	15.8	84.2	0	0	21.1	78.9	0	0
> 12 years	50.0	32.9	13.2	3.9	56.6	28.9	13.2	1.3





The homeopathic test preparation, SANUKEHL Staph, consists exclusively of Staphylococcus aureus e volumine cellulae in the 6th decimal potency. SANUKEHL Staph was used in a very broad application range in accordance with Isopathy, whereby the preferred application was independent of the patients' age. The main indications were angina tonsillaris, otitis media, sinusitis as well as recurrent infects of the urinary tract and enteritis. A thorough diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form.

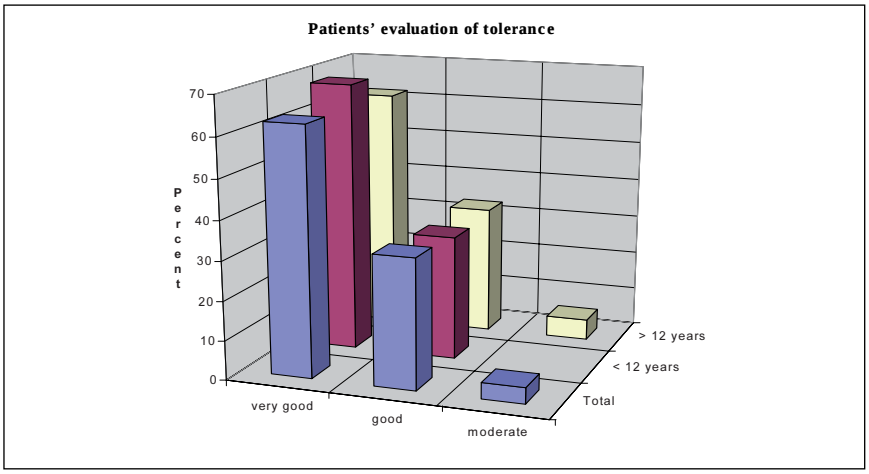
Amongst the children (< 12 years) the therapy lasted 58.5 days ± 105.6 days, approx. two thirds shorter than in the adult group with 186.4 days ±157.3 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the children under 12 years, the primary therapy duration lasted up to 25 days (63.2% of all patients). Amongst the adults were the largest groups with 47.4% of the patients with more than 150 therapy days and 21.1% with a therapy duration between 25 and 50 days.

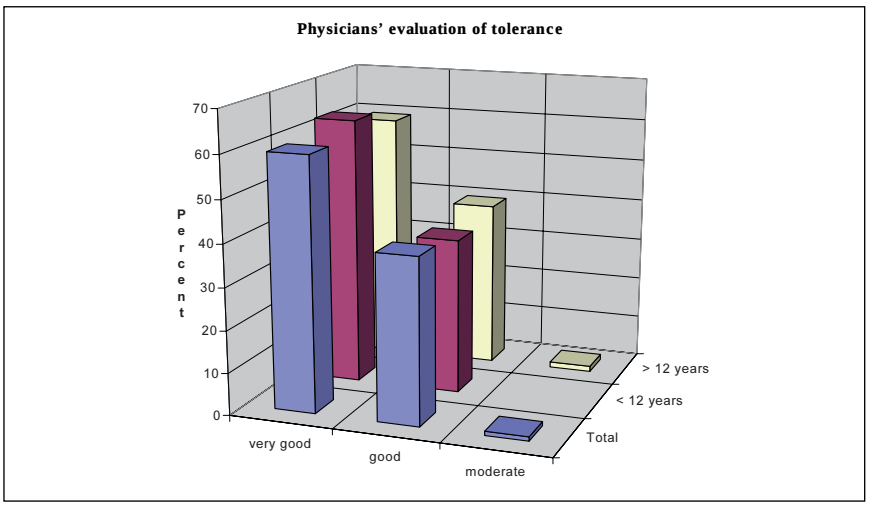
58 patients took the drops orally and 58 patients were treated topically. Multiple counts were necessary as 18 patients took the drops orally as well as topically. The recommended dosage was taken. In the group of patients under 12 years, the drops for oral and topical application were dosed according to age. In monotherapy the medium dosage for topical application was almost twice as large as in the combination therapy. In the combination therapy the dosage of the drops was even higher than in the monotherapy.

All 98 patients included in this study had not previously been treated with SANUKEHL Staph D6 drops. For this reason a comparison between first and repeated application was not possible.

The therapeutic progress was determined by evaluations conducted respectively at the beginning and the end of the therapy. 86.6% of the patients and 88.7% of the physicians rated the efficacy of the therapy as "very good" and "good". The evaluation by physician and patient was better in the adults' group, whilst the children's group was evaluated exclusively with "very good" and "good". For 83.7% of all patients participating in the study, compliance was certified to be "good" or "very good".

Evaluation of Tolerance								
Patients group	Patients' evaluation [%]				Physicians' evaluation [%]			
	Very good (%)	Good (%)	Moderate (%)	Poor (%)	Very good (%)	Good (%)	Moderate (%)	Poor (%)
All patients	62.9	33.0	4.1	0	59.8	39.2	1.0	0
< 12 years	68.4	31.6	0	0	63.2	36.8	0	0
> 12 years	61.8	32.9	5.3	0	59.2	39.5	1.3	0





62.9% of patients and 59.8% of physicians rated the tolerance to be "very good", whilst 33.0% of patients and 39.2% of physicians gave SANUKEHL Staph a "good" tolerance rating. 4.1% of the patients and 1.0% of the physicians rated it "moderate". No case was assessed as "poor" with patients and physicians alike.

No therapy was discontinued and no side effects occurred.

First published in the German language in the SANUM-Post magazine (77/2006)

The Tubercular Constitution as a Common Cause of Chronic Diseases and its Treatment with Naturopathic "Regulation Therapy"

by Dr. Dr. Peter Schneider

It's much easier to ride the horse in the direction he's going

– Werner Erhard

Historical Background of the Tubercular Constitution

Almost 200 years ago, Samuel Hahnemann (Hahnemann, 1810, 1828) tried to classify chronic disease into certain "miasms" (disease energies). He attributed the basic toxic load to Psora (in Greek "the itch"), to Syphilis and to Sycosis ("fig-wart disease"). This work dates from the latter part of his life.

Even in ancient cultures it was recognised that all the chronic diseases that afflict mankind form a unified whole. Escaping from his opponents to Paris at the age of 80, Hahnemann tried to secure this knowledge in the 6th edition of his "Organon of the Rational Art of Healing" by adding a number of notes to the 5th edition. Due to the fierce opposition of some medical doctors to the notion of Psora, the 6th edition was not published until 1921. In that way the fanatically contested idea of Psora, which Hahnemann called the "thousand headed monster of disease" and which was dismissed as a senile fantasy of his, was handed down in its original form.

Among Hahnemann's numerous followers John H. Allen deserves mention, for his intensive work on the theory of the miasms. (Allen, 1996). Hahnemann and his pupils had already observed that suppressive treatment of disease would intensify and increase the miasmatic disease energies. It was further realised that, when inherited, Psora and Syphilis may completely merge together. The tubercular constitution is a "mixed" miasm and a result of this merging together. Allen calls it "absolutely the strongest of all disease states or conditions". It can be inherited or acquired and is also called "Pseudopsora".

As the tubercular constitution does not signify a case of clinical tuberculosis, other terms such as "paratuberculosis", "tuberculinic" or "tubercular miasm" were introduced later. However, the term "para-tuberculosis" is nowadays used internationally, in a different sense, to denote an illness caused by Mycobacterium paratuberculosis (Johne's disease in cattle).

Between 55 and 100 years ago clinical tuberculosis was widespread, and intensive research on it was carried out. In Berlin, Germany, Robert Koch pioneered the diagnosis and treatment (Tuberculinum Koch) of tuberculosis. His assistant Carl Spengler carried on his work and based his new methods of diagnosis and treatment of chronic illness on Koch's findings (Spengler, 1911). Above all, Spengler's work was concerned with the different morphology of strains of mycobacteria ("dualism") and with the close relationship between tubercle bacteria and the pathogenic agent of syphilis, whose bacterial form is found in mixed cultures from tuberculosis patients. Spengler showed that the presence of the syphilis pathogen can be demonstrated within the cells of an organism in an ultra-small and primitive variety – even when an infection by this pathogen had never occurred during the individual's life-time.

It was assumed that the general spread of "inherited syphilis" stems from the beginning of the 16th century, when a whole population was infected with a syphilis pandemic "imported" from America. Anyone who did not die of this infectious disease at that time, retained a residual toxicity in the body that was passed on through generations and, according to Spengler, would later show up as an "inherited virus".

Spengler developed the so called "Spengler colloids" which were named after him and are antigens from different bacteria and anti-toxins produced from the blood of highly immunised rabbits. With the help of these substances it is possible to diagnose various chronic diseases such as the "inherited toxins" of tuberculosis and syphilis (see POLY-SANS, produced by the SANUM-KEHLBECK Co).

In a study on trans-placental carcinogenesis in mice, an extra-chromosomally transmitted susceptibility to tumour growth could be observed (Schneider, 1981). In the F2-generation only those animals showed an increased occurrence of tumours, whose parent of the same sex had been transplacentally exposed to the chemical carcinogen (DMBA) and had been crossed with a non-treated animal. This dependency on the sex and trans-placental exposure regarding tumour formation permits the assumption that extra-chromosomal influences are at work.

By the end of the last century the French chemist and pharmacist Antoine Béchamp had claimed (Béchamp, 1912), that certain micro-organisms could occur in various forms and stages of development. Under exactly defined conditions they would occur, ranging from the lowest forms to the highly developed stages of bacteria and fungi. He found that all animal and plant cells contain minute granules ("microzymas"), which do not perish after the death of an organism, are responsible for fermentation, and from which other micro-organisms could also develop. These microzymas would be present in every living species, in humans, animals and plants; they were eternal and indestructible and represented a bridge between non-living and living matter. Under certain pathogenic influences these microzymas could develop into bacteria with putrefacient and fermenting properties. This meant that disease had its origin mainly within the body.

Claude Bernard, a French physiologist and a contemporary of Béchamp, confirmed his results and found out in addition that not the micro-organisms themselves are harmful, but primarily the "soil" in which they multiply.

Another contemporary of theirs at the end of the nineteenth century was Louis Pasteur. He claimed that the explanations of Béchamp and Bernard were arrant nonsense. He contested these views in accord with the botanist Cohn (Breslau) and Robert Koch's theory of "monomorphism" (meaning that each type of bacteria is only allowed one mode of growth and manifestation). His opinion prevailed among the experts of his time and still does so even in modern times. Nevertheless Pasteur said on his death bed: "Bernard is right; the soil is everything, the microbe nothing". Pasteur's private notes about his scientific research were kept secret from the general scientific community at his request. Not until 1975 were 10,000 pages of his laboratory protocols handed over to the historian G. L. Geison at Princeton University, who spent almost 20 years evaluating them. In 1993 Geison handed over his results to the American Association for the Advancement of Science in Boston. In 1997 a book containing Geison's findings was published. (Geison, 1997). This book shows Pasteur's merits, but does not cover up the fact that that he manipulated some of his experimental results and contravened medical, scientific and ethical rules.

Fontes (Fontes, 1910) who had based his research on Spengler's results, delivered important proof of the "pleomorphism" of bacteria. He was the first to provide proof of the infectiousness of bacteria-free filtrates of TBC-bacterial cultures. As a result of his research Fontes assumed that not only the predisposition to tuberculosis could be inherited, but also the virus in its "filterable", granular form. He further thought that the latter could remain latent ("latent tuberculosis") or could develop slowly into the classic bacterial type.

G. Enderlein (zoologist and microbiologist, curator of the zoological museum of Berlin University, and microbiologist for the German army in Stettin during World War I) reported in 1916 for the "Friends of Natural Research", Berlin, about his time as a bacteriologist in the army and his research results regarding the development of bacteria. Owing to the prevailing conditions resulting from the war, his monograph on this subject was not published until 1925 (Enderlein, 1925). As he was describing morphological facts that had previously been unknown to microbiology, he developed a whole new terminology; however, this resulted in the procedures he described being difficult to understand.

According to Enderlein, microbes pass through a cycle which is specific to their species. The term "cyclogeny" describes the changes and the journey of pathogenic and non-pathogenic micro-organisms through all phases ("valencies"). The cycle starts below the limits of microscopic visibility, the viral sphere, then on via forms of higher valency like cocci and bacilli, to culminate in the fungal phases. The bacterial nucleus ("mych") has a special significance. Although this was already known before Enderlein, its function had not been interpreted accurately. According to the "basic Anatartic Law" fomulated by Enderlein, the increase in valency of the microbe depends on the "milieu"

that is present in blood and tissues, which is mainly characterised by its pH value. Bacteria can either multiply asexually by division or branching ("auxanogeny") or sexually after prior fusion of cell nuclei ("probaenogeny"). Sexual multiplication is essential for movement to a higher or lower phase. 40 years after Enderlein's discovery, the Nobel prize was awarded to Lederberg in 1958 for discovery of "polymorphy" and sexual multiplication of bacteria by the fusion of cell nuclei (Lederberg, 1958).

Apart from naming the various phases in the development of microorganisms, Enderlein also succeeded in proving the existence of the most important symbiont ("endobiont") in warm-blooded creatures. He discovered *Mucor racemosus Fresen(ius) 1870*, in all its developmental stages from viral to fungal. In the low valency stages, the endobiont lives as a physiological regulator; in the higher valency stages it will develop pathogenic characteristics, depending on the environment (or milieu) that surrounds it. Changes in the environment which are followed by an endobiosis occur in all chronic illnesses. The endobiosis caused by *Mucor racemosus* in a higher-valency form is characterised by congestive symptoms (e.g. diseases of the blood and venous system, wounds, hearing loss and neurodermatitis).

Enderlein also found that the pathogenic higher-valency phases of the endobiont could be reconverted into a non-pathogenic phase by introducing low-valency forms while simultaneously treating the milieu ("isopathic therapy"). These processes can be observed with the help of dark-field microscopy of vital blood. (Schwerdtle and Arnoul, 1993; Bleker, 1997).

According to Enderlein, viruses are cell-free primitive forms ("filum") of the endobiont, from which bacteria may be grown. (For example: the tobacco mosaic virus, from which it was possible to breed bacteria after several months); bacteriophages however are "spermits" of the microbes (Enderlein, 1954).

The causative agent of the second electively pathogenic endobiosis which, in contrast to the Mucor symbiosis, is non-physiological, was identified by Enderlein as the mould *Aspergillus niger van Tieghem*. In its polymorphy and phase-dependent pathology this is believed to be a causative agent of cancer (Dechow, 1933) and tuberculosis. Vaudremer (1921) and Tissot (1925) had already found a genetic connection between the tubercle bacillus and fungi of the species Aspergillus (according to Enderlein, 1949).

The cyclode of *Aspergillus niger*, according to Enderlein, is a scission from the cyclode of *Mucor racemosus* (Figure 1).

According to Enderlein, the low valency phases of *Mucor racemosus* and *Aspergillus niger* are transmitted via the placenta.

The higher and high valency phases of Aspergillus are closely connected with calcium metabolism and cell respiration (citric acid cycle) and they cause chronic tubercular diseases in warm blooded creatures "to the right of the biological incision" (Reckeweg, table 1). Examples are chronically relapsing susceptibility to infections, tuberculosis, paratuberculosis, asthma, arthrosis, ankylosing spondylitis, cysts, ovarian and prostate diseases, as well as cancer. Among the tubercular symptoms degenerative diseases such as auto-immune disorders may also be found.

The particular significance of high-valency fungal forms in the development of neoplastic disorders was confirmed by Privy Councillor Prof. Dr. F. Gerlach, Director of the Bundesanstalt für Tierseuchenbekämpfung (National Institute for the control of epidemics among animals) in Mödling near Vienna, following detailed research. Gerlach was able to culture fungi from cancerous

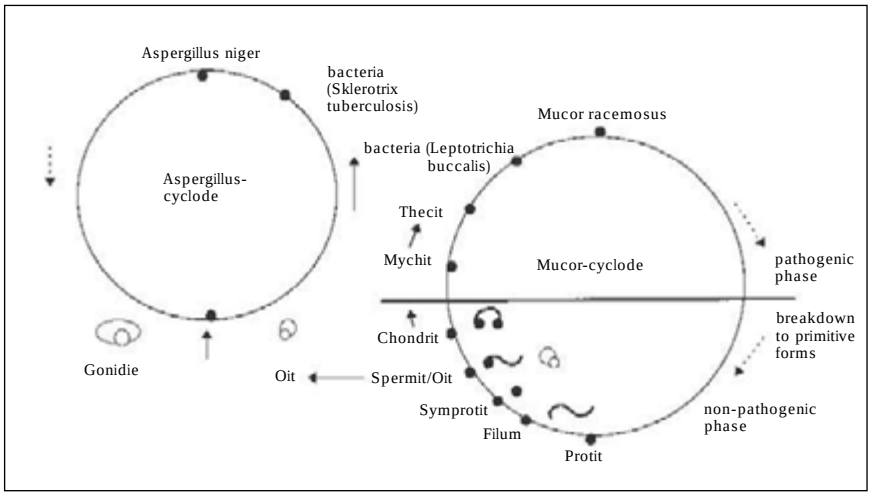


Figure 1: Hypothetical separation of the Aspergillus niger cyclode from that of Mucor racemosus (Arnoul, 1998; Rau, 1998)

material of human or animal origin (including chemically induced tumours from laboratory animals) regularly (Gerlach, 1948). Later he also found that mycoplasma play an important role in carcinogenesis. From this it may be assumed that mycoplasma which, according to Mattman are barely distinguishable from CWD-types (see below), are higher valency forms of the *Aspergillus*-cyclode.

Tubercular diseases were given various names by Enderlein's contemporaries, without acknowledging any connection to the bacterial cycle. Scrophula, lymphatism, camouflaged tuberculosis (Patromikolas), masked tuberculosis (Willy Bircher), certain forms of rheumatic disease (Poncet), latentia, tubercular toxicosis, paratuberculosis. "Much's Granules and Spengler's splinters" also belong in this category.

The "Basit", "Linit", and "Ascit" stages of *Aspergillus* are the short and long bacilli of *Sclerothrix tuberculosis Koch 1882*, acidoresistant and non-acidoresistant, the cultivation of which was described by Enderlein in all its phases (Enderlein, 1959).

After Enderlein, Harmsen also described forms of *Mycobacterium tuberculosis* which deviated from the slender bacillary form: branched varieties, granula, acidoresistant and non-acidoresistant forms, mycelium formation, nuclear equivalents and vacuole formation (Harmsen, 1952).

Just as the low-valency phases of *Mucor racemosus* are especially suited to the treatment of endobiosis, so tubercular diseases can be treated very effectively isopathically with low valency phases of *Aspergillus niger*. According to Enderlein the *Aspergillus*-cyclode is an off-shoot from the *Mucor*-cyclode and therefore the medicine is also prescribed in a combination from both cyclodes.

An extensive survey of the numerous studies on polymorphic "symbionts", particularly in German speaking countries, was carried out by Windstosser (Windstosser, 1995).

In English-speaking countries too, intensive research on the pathogenicity of polymorphic forms of microbes has been carried out during the last 40 years. Probably because of the language barrier, the results of earlier research remained unnoticed. Only in recent times has an effort been made by Canadian research groups to pool this knowledge (First International Symposium on Pleomorphic Microbes in Health and Disease, 18th-19th June 1999, Montreal, Canada).

The investigations to date into the properties and pathogenicity of the so called "Cell Wall Deficient Forms" (CWD) was recently summarized by Lida H. Mattman, Emeritus Professor of Microbiology at Wayne State University, Detroit, Michigan (Mattman, 1993).

"CWD" is used as the umbrella term for synonyms like "L-forms", "L-phases" or "spheroplasts" that can be found in the literature. CWD also covers the previously used term "protoplast". CWD have special characteristics that are not present in classical micro-organisms:

- Destruction of many forms during fixation with heat;
- they usually require soft agar, grow under the surface and need a mature, autoclaved culture medium;
- they typically grow within erythrocytes;
- they are often serophilic;
- most types grow best in a hypertonic and alkaline environment (pH 7.8 – 8.0);
- CWD are able to revert to classical bacterial forms.

It is only possible to culture CWD under special conditions. The culture medium has to be stabilised with an extract of heart muscle, 15% inactivated horse serum and 3.5% sodium chloride.

The following are some examples of the intra-erythrocytal growth of CWD:

Normal and Physiological:

Staphylococci, *Bacillus licheniformis* (in approx. 30% of all healthy humans).

Sarcoidosis:
Mycobacteria.

Kaposi's sarcoma:
Fungi

Nephropathy:
Lysis of erythrocytes from 489 patients: the same species as in urinary infections

Idiopathic hæmaturia:
Bacteria similar to streptococci; in contrast to this, children with nephrotic syndrome exhibited an elevated staphylococcal growth-rate

Systemic lupus erythematosus:
Bacteria connected with nephrotic diseases

Crohn's disease:
Pseudomonas, mycobacteria

Auto-immune diseases:
CWD act as haptens and stimulate the formation of haemolytic antibodies (Example: paroxysmal hæmoglobinuria due to cold in syphilitics)

The formation of pathogenic CWD from bacteria can be induced by

suppressive treatment. In vitro their formation is possible through antibiotics, e.g.:

Penicillins:
Inhibition of murein synthesis: *Brucella, Clostridia, E. coli, Haemophilus influenzae, Listeria monocytogenes, Proteus mirabilis, Salmonella gallinarum, S. typhi, Vibrio cholerae, Vitreoscilla.*

Sulphonamides:
Staph. aureus

Kanamycin, Tobramycin, Chloramphenicol
Inhibition of protein synthesis, resulting in surface changes in bacteria: *E. coli, Klebsiella pneumoniae, Bacillus megaterium, B. polymyxa, Serratia macescens, Sarcina lutea, Staphylococcus aureus, salmonellæ, shigellæ, Proteus.*

Aztoreonam (Monobactum):
surface changes in *E. coli*

Erythromycin:
Staphylococcus aureus (and at least 40 other macrolid-antibiotics such as Leucomycin, Oleandomycin, Spiramycin, Tylosin)

Tetracyclines:
Staph. aureus, E. coli, K. pneumoniae, B. megaterium, B. polymyxa, Serratia marcescens, Serratia lutea, Salmonellæ, Shigellæ, *Proteus*.

As an example of an in vivo induction of CWD by antibiotics Mattman names antibiotic treatment of mastitis in cows caused by *Staphylococcus aureus*:

- apart from the classical bacterial forms, the CWD of *Streptococcus agalactiae, Staphylococcus aureus and Corynebacterium pyogenes* were also demonstrated as causative of bovine mastitis (Bergmann and Böckel, 1989).
- following treatment of mastitis caused by *Staphylococcus aureus* with Cloxacillin the excretion of classical forms of cocci ceased within a few days, whereas CWD forms of *Staph. aureus* continued to contaminate the milk for more then 30 days (Sears, P.M. et al., 1987).

Nowadays the induction of pathogenic CWD in vivo by using antibiotics is of great importance as antibiotic-resistant micro-organisms are widespread and can no longer necessarily be destroyed (Beyer, 1999). On the other hand CWD commonly escape from the immune system due to their lack of a cell wall and continue to act as haptens. To support the organism in the elimination of cell wall deficient microbial forms, the SANUM-therapy which includes SANUKEHL preparations should be the treatment of choice. (Schneider, 1999a; Werthmann, 1999). As an example, the well proven **treatment of mycoplasma and chlamydia infections** may be cited; according to Enderlein these belong to the cyclode of *Aspergillus*:

- 1-2 times weekly a mixed injection of NIGERSAN 5X and CITROKEHL
- daily SANUKEHL Pseu 6X in the evening: 4 drops to be taken internally and 4 drops to be applied topically.

On the basis of clinical research to date it can reliably be asserted that:

- Micro-organisms can be of a polymorphic phenotype, from the smallest viral structures to bacteria and fungi.
- CWD of micro-organisms (staphylococci and bacilli) appear physiologically in the erythrocytes of healthy humans.
- Cell wall deficient forms can occur in vitro and in vivo under certain environmental or "milieu" conditions and can be pathogenic in vivo.
- CWD pathogenic forms can live as parasites within erythrocytes and can be observed in vital blood under a dark-field microscope.
- Suppressive treatment of disease, especially with antibiotics, can induce the development of CWD.
- Cell wall deficient forms of mycobacteria are the real carriers of a tubercular constitution.
- CWD are able to revert to classical forms of bacteria. According to Enderlein they can move through their cyclodes in both directions.
- Pathogenic forms of micro-organisms can be rendered harmless when transformed by their non-pathogenic regulatory forms.

Homotoxicology According to Reckeweg

According to Reckeweg (Reckeweg 1975, 1980) the body's "major defence system" consists of 5 different mechanisms (reticulo-endothelium, anterior pituitary-NNR-mechanism, nerve reflexes, liver detoxification, detoxifying function of connective tissues) by which the body defends itself against toxins ("homotoxins"), which can otherwise bring about illness. Either the body wins in this fight and gets damaged in varying degrees by the homotoxins or it succumbs to the toxic effects.

These views of Reckeweg's are an extension of Selye's research on the Adaptation Syndrome (Selye, 1953).

Table 1: The Homotoxicoses (6-phases table, according to Reckeweg)

Tissue	Humoral phases - Diseases of disposition			Biological incision	Cellular phases - Diseases of tubercular constitution		
	Excretion	Reaction	Deposition		Impregnation	Degeneration	Neoplasma
Ectoderm	Saliva Nasal catarrh Sweat Tears	Dermatitis Rhinitis Furuncle Stomatitis,Thrush Herpes zost., Neuralgia	Warts, polypi Atheroma Cataracta senilis Incipient asthma		Migraine, leukoplakia Multiple scler., epilepsy Asthma, hay fever Rhinitis atrophicans Ulcus ventric./duod.	Chron. dermatitis Lupus, psoriasis M. Cushing MS, M. Parkinson M. Menière	Basalioma Adenoma Melanoma Sarcoma
Entoderm	Intestinal juice Bile Pancreatic juice	Colitis syndrome Enteritis Parotitis Hepatitis Cholangitis	Constipation Megacolon Struma Silicosis Cholelithiasis		Asthma Ulcus ventric./duod. **Recurrent infections** Chronic tonsillitis	**Tuberculosis** Diabetes mellitus Cirrhosis of liver	Carcinoma of pancreas, gall bladder, intestines Myeloma Sarcoma
Mesenchym	Antibody production Vicarious bleedings Menstruation	Oedema Abscess, ulcer Angina Typhus Appendicitis Polyarthritis	Adipositas Gout Lymph node swellings Lipoma Exostosis		Lymphatism Elephantiasis Incip. agranulocytosis	**Tuberculosis** Scleroderma Fibroma Otosclerosis Paradontosis (final) Leukaemia, lymphoma	Sarcoma, carcinoma of kidneys Sarcoma, carcinoma of serous membranes Uterine carcinoma Myosarcoma
Mesoderm	Lactic acid production Discharge of serous membranes	Cystitis Pyelitis Nephritis Prostatitis Salpingitis Muscular rheumatism	Myogelosis Myalgia Rheumatism Cysts		Hydronephrosis Pro-stages of tumours	Exhaustion (Selye) **Tuberculosis** Atrophic kidney Muscular dystrophy	Carcinoma of skin and genitals
Excretion principle, prognose favourable					**Condensation principle, prognosis doubtful**		

The damage caused by the homotoxins manifests in the form of an impairment or blockage of the intracellular enzyme systems. In Reckeweg's system, the different grades of toxic effects are expressed as six different phases. During the first three phases (excretion, reaction, deposition) the excretion of toxins is successful, whereas during the three cellular phases that lie beyond the "biological incision" (impregnation, degeneration, neoplasm) the cells are increasingly damaged and become more or less non-functional. The three cellular phases often result from the suppression of acute illnesses. Numerous chemically defined substances such as antibiotics, antirheumatic drugs, analgesics, bacteriostatics among others, according to Reckeweg often have an irreversible blocking effect on the intracellular fermentation systems and bring the cellular phases four to six into play ("progressive vicariation"). These phases correspond to the terms "Psora" and "Sycosis" which were originated by Hahnemann, or with the "Tubercular constitution". According to Reckeweg's six-phase scheme (table 1), clinical tuberculosis only appears in the degeneration phase.

According to Reckeweg the aim of a biological therapy is to enhance detoxification and excretion via the major defence mechanism. The reactivation of the damaged or blocked enzyme systems by administering adequate co-factors such as vitamins, trace elements, intermediate citric acid cycle catalysts

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The following authentic case example will serve to clarify the term "progressive vicariation". The patient is a young male whose medical history began in infancy as a "dysbiosis" with an acute, inflammatory, excretory reaction and developed over 16 years into a degenerative demyelinisation of the central nervous system:

Age	**Disease**	**Treatment**
2 months	Pre-toxicosis with Coli-dyspepsia, diffuse peri-bronchitis, high fever	antibiotics i.v.and i.m., milk-based "health-food", fluoride
4 months	Super-infected varicella, anal fissures, streptococcal sepsis, high fever	antibiotics, antipyretics,Vit.D3
5 months	Coli-dyspepsia, chickenpox, diarrhœa, vomiting	antibiotics, immuno-globulins, pectins, porridge with full-cream milk, fluoride, topical corticosteroids
1 year	superinfected intertriginous eczema, eczema of scalp, infection of lungs (mild), severe suppurative otitis ext., high fever	antibiotics, antifungals, dermal application of salicylic vaseline and oil; no improvement of symptoms
14 months	histiocytosis X, constipation	chemotherapy, prednisolone
2 years	histiocytosis X, recurrent temporal focus of infection	chemotherapy, corticoids
6 years	accident	tetanus vaccination
7 years	Loss of teeth after chemotherapy	----------
14 years	Cerebellar ataxia, hydrocephalus int., anal fistula, kyphoscoliosis, dwarfism, anus præter, mental and motor retardation	valve implant owing to hydrocephalus
16 years	increasing muscular dystrophy, nystagmus,astigmatism, demyelination in pons and mesencephalon, strabismus, unable to walk after steriotactic biopsies, patient confined to a wheelchair	further attempts at corticoid treatment; aborted after onset of Cushing's syndrome and aggravation of acne.

and quinones is of the utmost importance. A biological therapy also aims to transform the "dangerous" phases on the right side of the biological incision into less harmful phases ("regressive vicariation"). An example is the induction of inflammatory reactions in neoplasma phases.

Reckeweg concludes that all natural healing operates according to the principle of regressive vicariation. The individual phases of the pathogenesis are briefly re-experienced in the reverse order of their appearance, beginning with the most recent events. This means that during recovery apparently new illnesses seem to appear (e.g. appearance of acute herpes during the treatment of a degenerative disease). Under no circumstances must these symptoms be suppressed. In such cases relief can be obtained by intensifying the use of excretory measures, by giving a classical homœopathic remedy that is indicated for a certain stage of illness, or by acupuncture.

Characterisation of the Tubercular Milieu

By "the milieu of the tissues" we mean the "cell milieu system", whose properties have been described by Pischinger (Pischinger, 1990).

Changes in the milieu can be characterised on various levels, for instance by dark-field microscopy or on an electromagnetic level with the aid of Vincent's system of Bio-electronics (BEV).

In the dark-field microscopy hæmogram of native blood changes may be observed in the morphological structure of erythrocytes related to their position on the right side of the "biological incision". The observations extend from changes in the shape of erythrocytes to forms similar to a "thorn apple" (see Figure 2; Schwerdtle and Arnoul, 1993; Bleker, 1997). These structures have been described, documented and named by Enderlein and they can easily be reproduced. For dark-field microscopy examination a special microscope is required.

Another possibility for the characterisation of the milieu is afforded by Vincent's system of Bio-electronics (BEV).

As was already known 100 years ago, the most important parameter for a milieu is the pH (Worlitschek, 1996). The pH represents the ion-potential for acidity and alkalinity and is the "magnetic factor" according to Vincent. The pH value is 7.40 – 7.45 in arterial blood, 7.35 – 7.40 in capillary blood, and in venous blood 7.30 – 7.35. An average blood pH of 7.2 is regarded as normal, but nowadays this is rarely attained. Based on regulatory reciprocal actions, the blood pH works in the reverse direction to that of the tissues, so that a blood pH of 7.5 is equivalent to a tissue pH of approx. 5.5. According to Enderlein the endobiont develops in the blood at a pH of 7.20 – 7.50.

Another important milieu parameter is the redox-potential. The significance of this parameter was discovered by the American doctor W.F. Koch (Koch, 1981). Koch was a physiologist and pathologist and from 1919 to 1949 he was director of the Koch Cancer Clinic in the USA. He introduced homœopathically prepared (6X or 9X) substances that contain carbonyl-groups such as glyoxals and quinones into cancer therapy and had to defend himself before American courts due to his innovative methods of treatment. As his results were brilliant, he was scarcely troubled by such accusations.

Koch assumed that pathogens such as viruses and antibiotics would be "anchored" in the metabolism as they reacted with amino-groups such as those of creatinine and

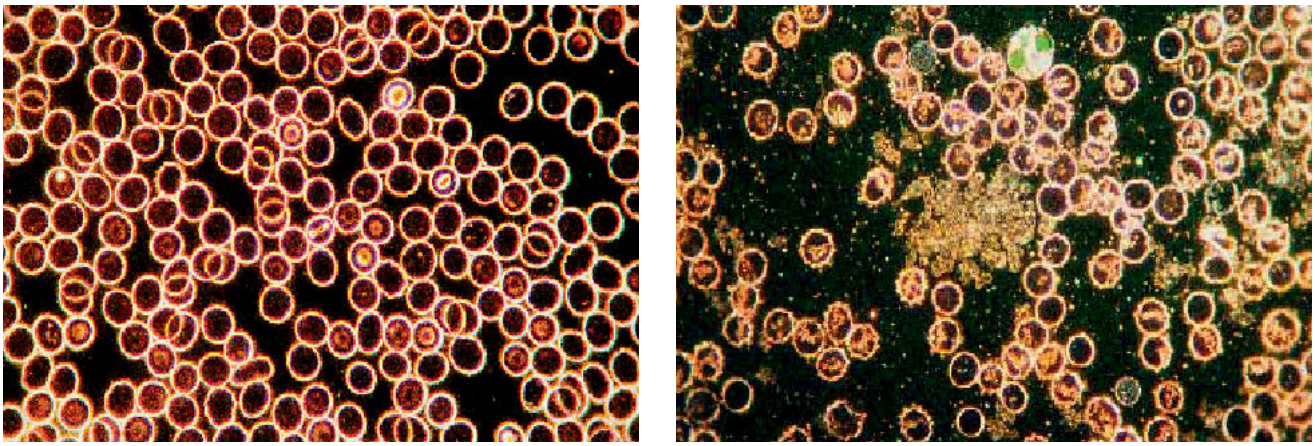

Figure 2: moderate (left) and strong (right) infestation of native blood with endobionts (from Bleker, 1997)

formed polymers, which would primarily impair the function of the respiratory chain. He guessed that the hypoxia that was created in that way was the reason for the development of cancer and other illnesses. Therefore Koch developed homœopathic preparations with a high redox potential in order to overcome this hypoxia and to disperse the anchored pathogens.

Until now it has not been possible to verify the mechanism by which his preparations work, but Mäkinen and Mäkinen (Mäkinen and Mäkinen, 1982) were able to demonstrate within a biological system that the substance methylglyoxal has "photo-enhancing" properties at a wave-length of 300nm. Apart from Glyoxal, Methylglyoxal was the most important of the substances employed by Koch.

It has long been known that essential metabolic processes are dependent on emission of quanta of light. It used to be assumed that this was merely a side-effect of chemical processes, but the German physicist Popp, employing considerable technical resources, proved that photons are of the greatest importance for inter-cellular communication (Popp et al., 1992). The light emitted by living cells in the form of biophotons is very weak (low-level luminescence). However, within a healthy organism, it shows a very high degree of coherence, similar to a laser, and therefore has a high quality of resonance.

As early as the 1920's, communication by means of light between the roots of two onions had been observed by Gurwitsch. In 1928 Reiter and Gabór of the Siemens research laboratory in Berlin showed that the radiation wavelength of this communication lies in the ultra-violet area of the spectrum at exactly 338nm. It was of particular significance that this radiation could be antagonised by weak light with a wavelength of exactly 300nm. This was exactly the same wavelength at which Mäkinen and Mäkinen had also found biological properties. Popp proved that, in neoplastic disease, the intensity of the photon emission is reduced. The same applies to its organisation (coherence). Cells from induced tumours of laboratory animals had largely lost their light contact, as compared with normal cells. On the basis of experience with medicines which are obviously able to influence photon emission, their properties also seem to be altered in other chronic diseases.

In the light of the photon research we may assume that the administration of Koch's homœopathic remedies causes the cells to increase their emission of light and therefore contributes considerably to the restoration of the organism's regulatory abilities. For the treatment of chronic illnesses a combination of Ubiquinone comp. (Heel) with CITROKEHL in a mixed injection has proved especially valuable. This combination not only stimulates photon emission, but also cellular respiration.

Apart from a modification of the redox potential to an "electrical factor rH_2" (rH_2=2 x pH + 30 x E [electron potential in mV]) the French hydrologist Vincent introduced the conductivity and it's reciprocal value, the specific electrical resistance r [ø] as a third essential milieu parameter (Elmau, 1985). Like pH and rH_2 these originally served to determine the quality of water, but it soon turned out that these three measuring units are equally suited to the evaluation of biological substrates. Vincent expanded the evaluation of the milieu to include the simultaneous measurement of the parameters in blood, saliva and urine.

With the help of these three parameters it is possible to show four quadrants of the biological milieus for the blood (Figure 3): The small box between the quadrants indicates the area of health.

Quadrant 1: acidic – reduced
favours the healthy living of higher organisms; it is the terrain for e.g. green algæ, simple microbes and symbionts.

Quadrant 2: acidic – oxidised
Has a disposition towards bacterial infections and to fungal infestation; is the terrain for e.g. lichens and fungi, therefore also for mycoses, tubercle and leprosy bacteria as well as antibiotic forms of fungi.

Quadrant 3: alkaline – oxidised – hypertonic, which is the area of the tubercular constitution
It is precisely the area of chronic disease in which pathogenic cell wall deficient bacterial forms (CWD) prefer to grow, according to Mattman. It is characterised by increased release of free radicals and, according to Vincent, disposes the patient to chronic viral diseases and degenerative processes. The dotted, downward-curving line which is curved downwards within this quadrant marks the area of malignant diseases; the diagonal line within this quadrant is the "line of thrombosis".

Quadrant 4: alkaline – reduced
Finally, this is the terrain for pathogenic germs such as pneumococci, typhus, cholera, the plague, as well as for kelp.

Within quadrant number 1 a normal healthy life is possible. Approximately a hundred years ago the frequent occurrence of clinical tuberculosis was very characteristic; the condition of the blood at that time often corresponded to quadrant number 2. While living conditions changed during the last 50 years, a further move towards quadrant number 3 has taken place. Therefore nowadays the classical bacterial infectious diseases are rarely seen and, in their place, chronic viral diseases are on the increase, and so are degenerative and malignant processes. Mycoses, which are frequently seen these days, indicate a transition from quadrant number 2 to number 3.

Looking at the changes of the blood milieu towards quadrant number 3, which is the quadrant of chronic illness from the bio-energetic point of view (table 2), it becomes clear that in contrast to the physiological conditions a marked increase of energy takes place in the blood. However, as cell metabolism is blocked, this energy cannot be put to use by the tissues. For that reason energy in the saliva is decreased and only a fraction of the energy is excreted with the urine, compared to the normal amount.

Owing to these changes in the milieu of blood and tissues serious changes take place in the basic system according to Pischinger. Based on the energetic changes in the blood in chronic disease, it can be assumed, that sufficient energy is present to ensure the survival of cell wall deficient bacteria and cytoplasm. Like viruses they do not need their own energy metabolism due to their parasitic life-style within erythrocytes and leucocytes, but simply require the equivalent of their cell nucleus.

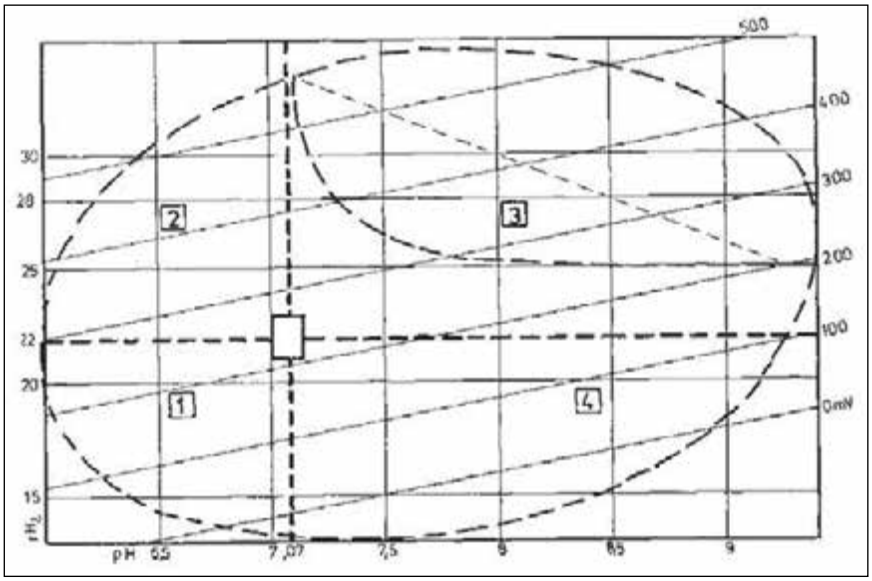

Illustration 3: Vincent's bioelectronics – the four zones of the biological terrain in the blood (from Elmau, 1985)

Should the pathological changes in the blood and body tissues of the population continue as previously and unchecked, it is very likely that the blood milieu will move into quadrant number 4. In this quadrant life as we know it today will probably no longer be possible. Incidentally, the condition of our pets and domestic animals is not so different from that of humans. Comparable milieu changes in the interior and exterior of plants also play a part in the development of plant diseases (Hoffmann et al., 1994). **This shows quite clearly that humans, animals and plants are all part of one common ecological system.**

The most important factor for milieu changes in humans is nutrition (Mielke, 1998); of especial significance is a high intake of animal protein. Furthermore vegetable foods only deliver a fraction of the nutrients that they used to contain a few decades ago as the soil in which they are grown is depleted.

As long as 30 years ago Kollath (Kollath, 1967) pointed out the result of an ongoing deficient diet ("mesotrophy"): "The situation is very simple: Following a diet rich in animal protein as recommended by Kühnau for younger as well as older people, those who follow this diet will move towards chronic illness and infirmity 'irrestibly and irrevocably', to use Kühnau's own words. If we can manage to convince people of the importance of a diet based on wholefoods, as I have suggested, then it will be possible gradually to regain the original state of health of individuals and that of following generations". Animal testing carried out on rats with a "scientific diet" had shown that the results of chronic malnutrition can get dramatically worse over only a few generations. This will show itself in the shape of malformations, stillbirths and finally extinction after the 4th generation.

As we know today, chronic malnutrition leads first to chronic intestinal inflammation with dysbiosis and, later, to a degeneration of the intestinal mucosa with atrophy of the villi (Werthmann, 1988a) and finally to

Ideal values					
	pH	rH_2	E	r	Power [µW/cm³]
Blood	7,10	22	234	210	261
Saliva	6,50	22	270	140	521
Urine	6,80	24	312	30	3245

Pathological values					
	pH	rH_2	E	r	Power [µW/cm³]
Blood	7,50	25	300	121	744
Saliva	7,25	26	345	310	384
Urine	4,80	19	282	127	626

Table 2: BEV-values and their energetic capacity in blood, saliva and urine under physiological and pathological conditions (calculation based on BEV-values)

the so-called "Leaky Gut Syndrome". This means that the intestinal mucosa becomes increasingly permeable to macro-molecules of the lumen, antigens and toxins, connected with an inflammatory-degenerative and/or atrophic destruction of the mucosa. As a result of the damage to the intestinal walls, the function of the gut as an excretory organ is seriously compromised. According to estimates in the USA, approximately 40% of the population there currently suffer from **leaky gut-syndrome**.

Taking the chronically inflamed and degenerated gut as a major cause of the tubercular milieu, we find that it has seven pathogenetic aspects:

1. Malabsorption of nutrients followed by flatulence and tiredness.
2. Absorption of large food particles leading to food allergies and new symptoms in the target organs like arthritis and fibromyalgia.
3. Damage to the carrier proteins resulting in a relative nutritional deficiency which can bring out a variety of symptoms, such as magnesium-deficiency-related muscle spasms or copper-deficiency-related elevated cholesterol values.
4. Impaired detoxification via the gut resulting in an increased sensitivity to chemicals (MCS).
5. Impaired defence by immunoglobulin A, leading to a lowered immunity to protozoa, bacteria, viruses and candida.
6. Bacteria and yeasts can penetrate the gut wall resulting in infection of body cavities and organs.
7. Formation of antibodies, which can penetrate the gut wall and resemble antigens of our own tissues, resulting in auto-immune diseases such as rheumatoid arthritis, lupus, multiple sclerosis, thyroiditis and other "incurable" diseases.

As approx. 80% of the body's immunologically active tissue can be found in the intestinal area, the tubercular milieu has a direct impact on the immune system. According to the American Food Marketing Institute, there is therefore a close relationship for the U.S.A. between diet and frequency of illness. (Source: Food Marketing Institute, USA, quoted by Reimerdes):

The relationships are as follows:

High Cholesterol	93%
Cardiac diseases	88%
High blood pressure	86%
Stroke	69%
Diabetes	65%
Intestinal cancer	60%
Prostate cancer	35%
Breast cancer	30%

Apart from diet, other influences may be of significance in the development of a tubercular milieu, such as disturbance fields, of which up to approx. 80% are located in the head area (particularly in teeth, sinuses, tonsils), or psychological factors. Disturbance fields or a heavy metal toxic load (e.g. amalgam from dental fillings) are the most common barriers to recovery in naturopathic therapy (Kobau, 1998). Figure 4 shows the relationship of various organs to the teeth.

Most important are generally suppressive treatment interventions and vaccinations (Elmau, 1985); these can alter the milieu so permanently that the metabolism is driven further into the tubercular constitution.

One example is diabetes mellitus which is a degenerative disease of the tubercular constitution. It is clear that a marked increase in this illness has occurred especially in elderly

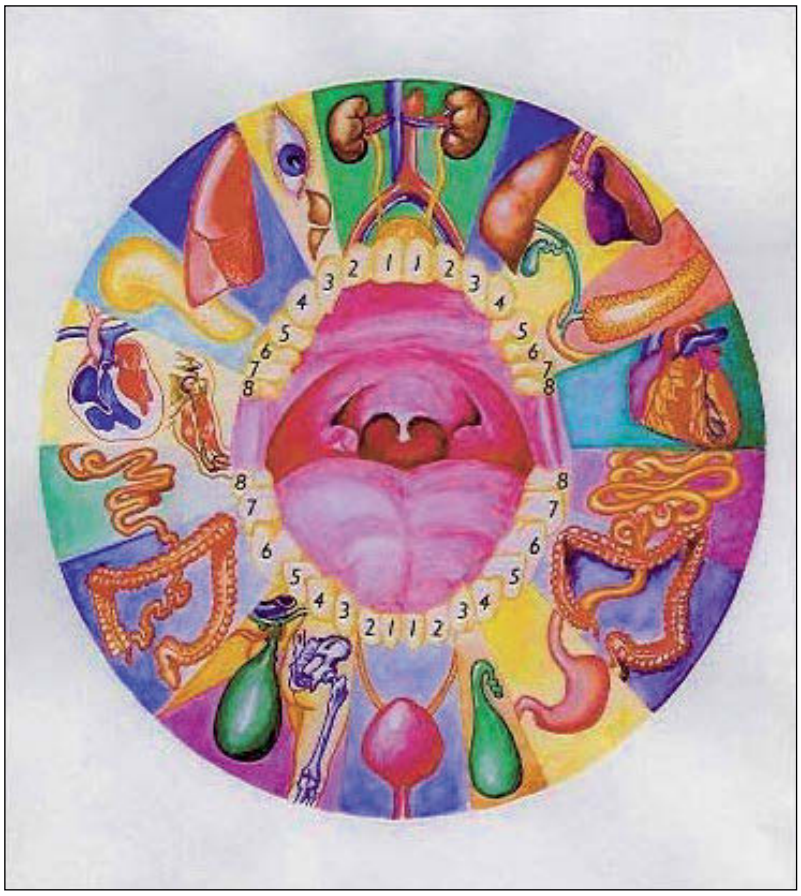

Figure 4: Relationships of organs to the teeth (Copyright by MU Dr. Josefa Jonàse)

American patients during the last 40 years (Figure 5). These curves run broadly parallel with those for other tubercular diseases and they also run parallel to the introduction of antibiotics, chemotherapy and vaccinations (Vithoulkas, 1998).

Naturopathic Regulatory Treatment of the Tubercular Constitution

Conventional medicine doubtless has its merits, and the aim of this article is not to disparage it. However, if medications are used which are known to favour the development of the tubercular constitution and therefore of chronic illness, the damage caused should be addressed by using naturopathic treatments in order to minimize the negative effects. Examples of such medications are vaccines, antibiotics and chemotherapy. Otherwise the widespread tubercular constitution and the anticipated move of the blood milieu into quadrant 4, according to Vincent, could signify a serious threat to the health of the population.

In conventional medicine, clinical tuberculosis is treated by combinations of anti-tubercular drugs. For other tubercular diseases such as cancer, even today surgical and chemotherapy measures are applied in many cases. However, gradually the realisation seems to be dawning that there are metabolic mechanisms that make a regulatory treatment of cancer possible.

Recently the results of a multi-centred study about the risk of melanoma were presented; this had been carried out with the support of “Deutsche Krebshilfe” (Project-No. 70-2112) (Kölmel et al., 1999). It was found that the “risk of suffering from a malignant melanoma decreases if an individual has experienced recurrent febrile infections”; “the risk of melanoma was significantly lower when the questioned individuals had had tuberculosis, severe staphylococcal infections (e.g. in the form of abcesses, inflammation of the mammary gland or of bone marrow), blood poisoning or pneumonia. The risk was also reduced when the questioned individuals had had a minor infection with fever above 38.5 degrees C, such as influenza, bronchitis, herpes or summer diarrhœa in the previous five years. The more infections the investigated individuals had had, the lower was their risk of

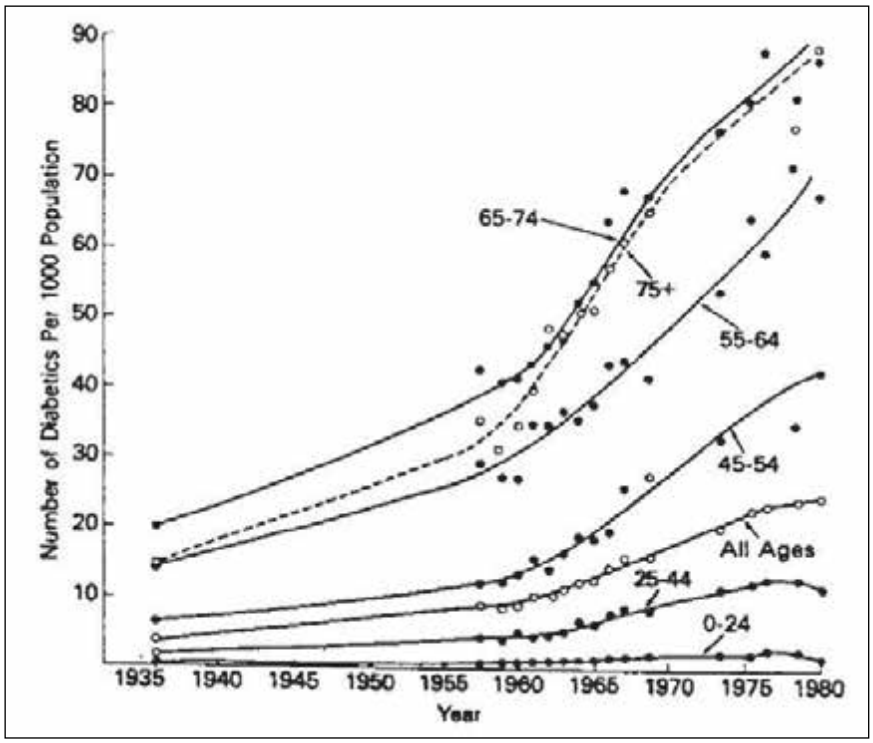

Figure 5: Tendency in the prevalence of patients in different age groups diagnosed with diabetes in the USA since 1935 (Harris, MI, National Diabetes Data Group, from data of the National Health Interview Surveys, National Center for Health Statistics, 1984) from F.A. Gries (1991)

suffering from melanoma. (Quote from a press release of the "Deutsche Krebshilfe", 1999).

These are things that practitioners of natural therapies have known for a long time.

Apart from the removal of obstacles to healing and a change to a wholesome diet, a naturopathic treatment of the tubercular constitution according to the guidelines laid down by Vithoulkas (Vithoulkas, 1998) should be undertaken.

Based on the investigations by Kollath and others, a fully nutritional diet consists of the following: (modified from v. Koerber et al., 1987):

- Preferably food of vegetable origin (predominantly lacto-vegetarian diet)
- Preferably unprocessed food (food should be as natural as possible)
- Ample consumption of uncooked fresh foods (approx. half of the total dietary intake)
- Preparation of tasty meals by using fresh, gently cooked food with only small amounts of fat.
- Avoidance of foods that contain additives.
- Avoidance of food that has been processed by certain technologies such as genetic modification, food design, irradiation.
- If possible only using products of approved organic farming (according to the guidelines of each country e.g AGÖL or IFOAM).
- Preferably regional and seasonal products.
- Food preferably unpackaged or wrapped in an environmentally friendly way.
- Avoidance or reduction of the general emission of pollutants and therefore of intake of pollutants by using environmentally friendly products and technologies.
- Reduction of depletion from refining, by reducing intake of animal foods; no meat from pork, hare or rabbit (Reckeweg).
- Preferably agricultural products grown and marketed under socially acceptable conditions (e.g. fair trade with developing countries).

These recommendations were further amplified by the pædiatrician and general practitioner Konrad Werthmann (Werthmann, 1997), who generally recommended abstinence from cow's-milk-derived protein and chicken's eggs.

Owing to the frequent damage of the gut and the impaired absorption resulting from it, most patients need orthomolecular food supplementation until their intestinal mucosa is restored. This supplementation should also contain anti-oxidants.

A basic principle of naturopathic regulatory treatment of the tubercular constitution is that it can only be successful so long as the patient still has the ability to regulate. Furthermore it is absolutely necessary to support the excretion of body-waste and toxins released from the "Pischinger area" during the treatment.

According to Vithoulkas the three levels of the human being are closely interconnected and have to be treated simultaneously to be able to overcome the tubercular constitution. They are **M (= mental-spiritual), E (= emotional-psychological)** and **P (= physical and material)**.

Besides treatment of levels M and E with adequate procedures (such as breathing exercises, behaviour therapy, psychological support as a part of anthroposophical medical treatment), the basic treatment with medical preparations consists primarily in a combination of milieu therapy, (classical or complex) homeopathy, biophoton activation, isopathy and immune modulation.

Treatment with SANUM-medications (see "Isopathic/Homeopathic Materia Medica") forms an important connecting link between the material level P and the two non-material levels M and E.

By way of illustration, a medicinal milieu treatment for the regulative eradication of the tubercular constitution by Werthmann (Werthmann 1999) is described below. This basic therapy has proved its worth in the treatment of children and adults over many years. According to Werthmann, adults receive the following treatment:

1. Ubiquinone comp. (Heel) + CITROKEHL: Mixed injection i.m. once weekly
2. for two weeks: EXMYKEHL 3X Supp: evenings Monday - Friday; Saturday and Sunday
   FORTAKEHL 5X one tablet to be taken twice
3. after two weeks for some months: Monday – Friday: in the morning 1 tablet MUCOKEHL 5X, in the evening 1 tablet NIGERSAN 5X, Saturday and Sunday: twice daily 1 tablet FORTAKEHL 5X.
4. from the beginning of the second week: alternating daily SANUKEHL Myc 6X or SANUKEHL Klebs 6X; 5 drops to be taken twice daily, plus 5 drops once daily for topical application.
5. Starting in week 3: 1 capsule UTILIN "S" (6X or 4X depending on the constitution) once every 14 days.
6. Acid-alkaline regulation with ALKALA N and SANUVIS.

The mixed injection with Ubiquinone and other substances that contain "carbonyl-groups" as well as CITROKEHL serves to activate the photons in the cells and to enhance cell respiration. EXMYKEHL and FORTAKEHL help to re-establish the symbiosis of the gut and MUCOKEHL and NIGERSAN reverse the evolution of the high-valency forms according to Enderlein; SANUKEHL preparations stimulate the immune system to eliminate cell wall deficient forms of pathogenic microorganisms (Cornelius, 1999; Schneider, 1999a; Werthmann, 1999). Finally, UTILIN "S" serves as a multi-potent immune-stimulant (Hartmann, 1990). Besides its general immune-stimulating property this preparation has a specific action in the eradication of the tubercular milieu. Therefore it is often used in the treatment of neoplastic diseases (Filion et al., 1999).

For the **excretion** of metabolic waste products and heavy metals from the "Pischinger area" the SANUM products CERIVIKEHL and especially USNEABASAN (Schneider, 1999b) are suitable; these are produced from lichens. The excretion needs to be enhanced for a few months; simultaneously the magnesium and zinc metabolism is regulated.

10 drops USNEABASAN (or CERIVIKEHL) should be taken in the morning, 1 capsule MAPURIT at lunchtime and 10 drops of ZINKOKEHL in the evening.

For the treatment of children the described basic treatment of the tubercular constitution is shortened and simplified (Werthmann, 1998b) as the ability to regulate is stronger then in adults. For infants of less than 1 year medication should not be administered orally if at all possible; instead topical application on the inner side of the elbow is recommended. Apart from this the dosage should be based on the number of years the child is old; one drop per year:

1. for 1 week once daily NOTAKEHL 5X drops or FORTAKEHL 5X drops for topical application or to be taken orally.
2. after that for several weeks: from Monday to Friday SANKOMBI 5X drops in the morning, Saturdays and Sundays NOTAKEHL 5X drops or FORTAKEHL 5X drops.
3. Alternating daily 1 – 2 drops UTILIN and RECARCIN to be applied topically in the bend of the elbow.
4. in addition, classical homœopathic treatment with Thuja 6X.

Summary

The inherited or acquired tubercular constitution is a common cause of most chronic diseases. This was already realised and written down by Hahnemann approximately 200 years ago. It has been confirmed by numerous other scientists such as Allen, Bernard, Béchamp, Enderlein and Reckeweg who investigated and clarified details. Although the existence of cell wall deficient variations (CWD) of pathogenic bacterial forms had initially not been recognised by conventional medicine, modern technology made it possible to show that they form an impor-

tant substrate for this constitution. The triggering factor for the development of the tubercular constitution is mainly a change in the blood milieu and tissue milieu. Malnutrition plays an important part in the development of such a constitution. During the last 40 years generally suppressive measures in the form of chemical medication and vaccinations have become increasingly significant. After an improvement in diet and the removal of any obstacles to cure, the naturopathic regulatory therapy can in many cases successfully help to cure chronic illness by removing the tubercular constitution. □

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First published in the German language in the SANUM-Post magazine (51/2000)

Treating Rheumatoid Arthritis with Haptens
Experiences with Propionibacterium acnes

by Dr. Konrad Werthmann, Austria

Rheumatoid arthritis is an inflammatory systemic disease of the connective tissue which mainly attacks the organs involved in movement. Its aetiology and pathogenesis is mainly unexplained: progressing in phases, it causes inflammatory and destructive changes to the limbs and the structures in the vicinity of the limbs, leading to pain, swelling and finally malformations. As a consequence of this there is generally an extensive loss of function of the locomotor system. The disease is widespread and affects women more frequently than men.

For a start, a change of diet

In order to be able to counter and treat this condition it is necessary to treat the primary area of interference which occurs in life, a diseased intestinal cell-milieu system, with a strict, long-term diet which excludes products made from cow's milk and hens' eggs, thus reducing the amount of protein consumed and also reducing the antigenicity of the food. This is successful only if the enteral mucosa is restored and the production of IgA is increased. In addition to the diet, the high valencies encouraged by the acid and protein should be treated with isopathic remedies (see table).

The second area of interference is mostly found in the teeth (root treatments, dental granuloma, exposure to amalgam) which should be liberally cleaned up. Only then can the individual immune systems recover from the sources of irritation.

The secondary areas of interference are best and most easily verified using electroacupuncture according to Voll (EAV) or thermoregulation according to Rost. If one can master these diagnostic aids they have a high degree

Diet:

Excluding products made with cow's milk and hens' eggs (Werthmann)

Isopathy:

FORTAKEHL 5X:	1 tablet twice daily for a period of three weeks; then
MUCOKEHL 5X:	2 tablets once in the morning and
NIGERSAN 5X:	two tablets once in the evening over a period of several months (!)
REBAS 4X:	1 capsule twice daily and
ALKALA N powder:	1 teaspoonful in hot water twice.
SANUKEHL Acne 6X Drops:	10 to 20 drops twice daily
UTILIN 6X capsules:	1 capsule once a week alternating with
LATENSIN 6X capsules:	1 capsule once a week together with minerals

(SELENOKEHL, ZINKOKEHL, Magnesium phosphoricum 6X glob.)

Table: Basic course of therapy

of significance. It is interesting that patients, particularly the female patients, react vehemently against any tooth extractions and then are totally astounded that after the extraction the mobility of their limbs improves spontaneously and within only a short time.

It is of interest that not every patient has experiences like these and in fact some patients present with a blockade. Although these patients hold strictly to their diet and the isopathic therapy, the pain remains. In such cases the darkfield microscopic examination of a drop of vital blood shows signs of regulation rigidity such as inactive leucocytes or unbalanced high or low valencies. Very often the darkfield image is mute and shows little in the way of reaction forms. These are however also patients in whom the immunoglobulin level (IgA/IgG) remains unchanged. Despite intensive therapy things come to a halt, and both the patient and the therapist find this frustrating.

The elimination of blockades using SANUKEHL Acne 6X

A development of this sort may be arrested with the help of haptens derived from Propionibacterium acnes (the remedy SANUKEHL Acne 6X drops). The SANUKEHLs contain polysaccharides (haptens) without a carrier protein. They initiate the intense production of antibodies which partly match the underlying diseases exactly and partly are of a more general nature. According to Kunze and Hartmann SANUKEHLs can have an anti-inflammatory effect, as too can the haptens from Propionibacterium acnes. Propionibacteria have a powerful immune-stimulating effect, and many inflammations occur in acne also.

Experience with 15 people aged between 20 and 52 years suffering from rheumatoid arthritis shows that blockades can be caused to regress if haptens from Propionibacterium acnes are prescribed in the form of 6X drops alongside the basic therapy (see table). Within two to four weeks the darkfield shows a clear reduction in the blockade symptoms: in particular there is an increase in the mobility of the leucocytes. In addition the patient reports less stiffness in the affected joints and less pain. The immunoglobulin titres IgA/IgG normalise only after some two to four months. This is probably linked to the building up of the intestinal mucosa which only becomes fully functional after the recovery of the ciliated border.

SANUKEHL Acne 6X is consistently administered to children by massaging it into the skin (5 to 10 drops twice) and to adults orally (10 to 20 drops twice). In stubborn cases an extra 2 drops are rubbed into the skin in the evening. To date no hypersensitive reactions have been observed.

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First published in the German language in the SANUM-Post magazine (43/1998)

Bacteria and Fungi

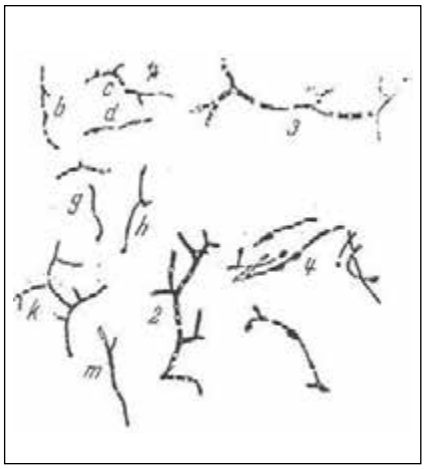
Two Microbial Phases Governed by the Energetic Milieu

by Dr. Dr. Peter Schneider

That which is below is like that which is above, and that which is above is like that which is below, in order to accomplish the miracles of one thing. (Extract from the Tabula Smaragdina of Hermes Trismegistus)

The pleomorphism of microrganisms has been the subject of intense scientific discussion at least since the time almost 100 years ago when the German researcher Prof. Enderlein carried out his work. Most recently, however, there have been more and more pieces of evidence which confirm the correctness of the view that bacteria and fungi can only be two different forms of particular microorganisms.

Back in 1895 Coppen-Jonas observed pleomorphic forms of *Mycobacterium tuberculosis* under the microscope, some with vacuoles inside the "threads" (Illus. 1). Node-shaped, strongly coloured swellings (4) were interpreted as spores.

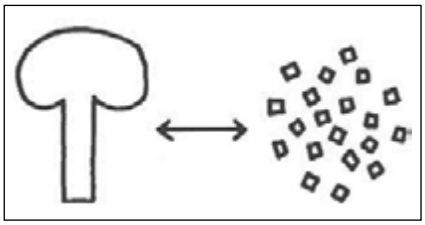


Illus. 1: Branching forms of Mycobacterium tuberculosis (from Coppen-Jonas, centre page of Bakter. I Orig 12, I, 1895)

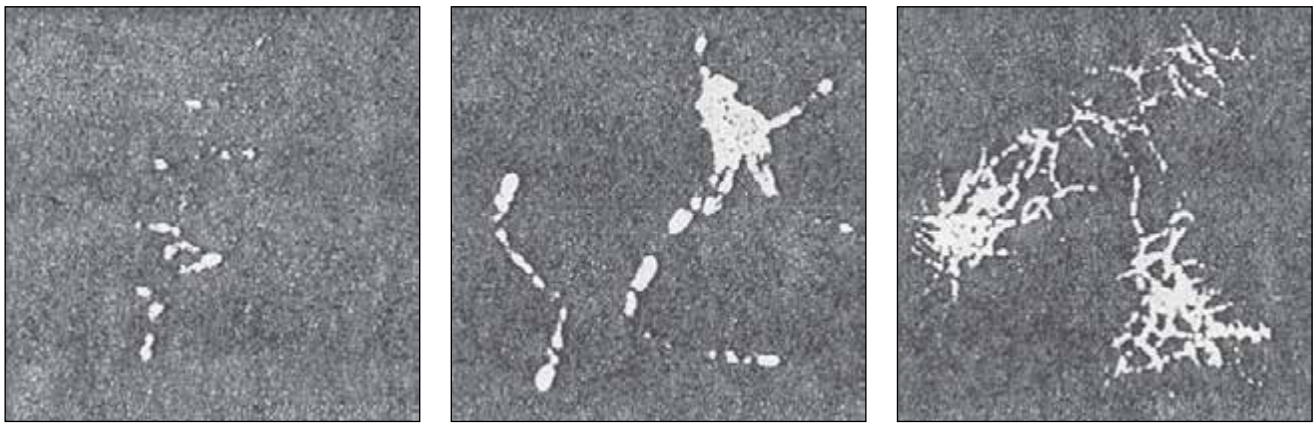
In later studies with mycobacteria, other authors apart from Enderlein were able to observe a pleomorphic growth relationship. The following pictures (Illus. 2) show the formation of branches in *Mycobacterium tuberculosis (gall.)* until the growth resembles that of fungi.

Milieu Conditions Required for Microbial Growth

In the last few years the phase relationships in the growth of fungi have been investigated very intensively by conventional microbiologists using the slime mould *Dictyostelium discoideum* as an example. Growth of this fungus can occur as an ordered structure in the form of a fungus or as an undifferentiated cellular phase in which the individual cells move like amoeba. Illustration 3, taken from the book "Biologie des Lichtes"



Illus. 3: Change of phase of the slime mould Dictiostelium discoideum (from Popp: "Biologie des Lichtes", Parey, 1984).



1 2 3

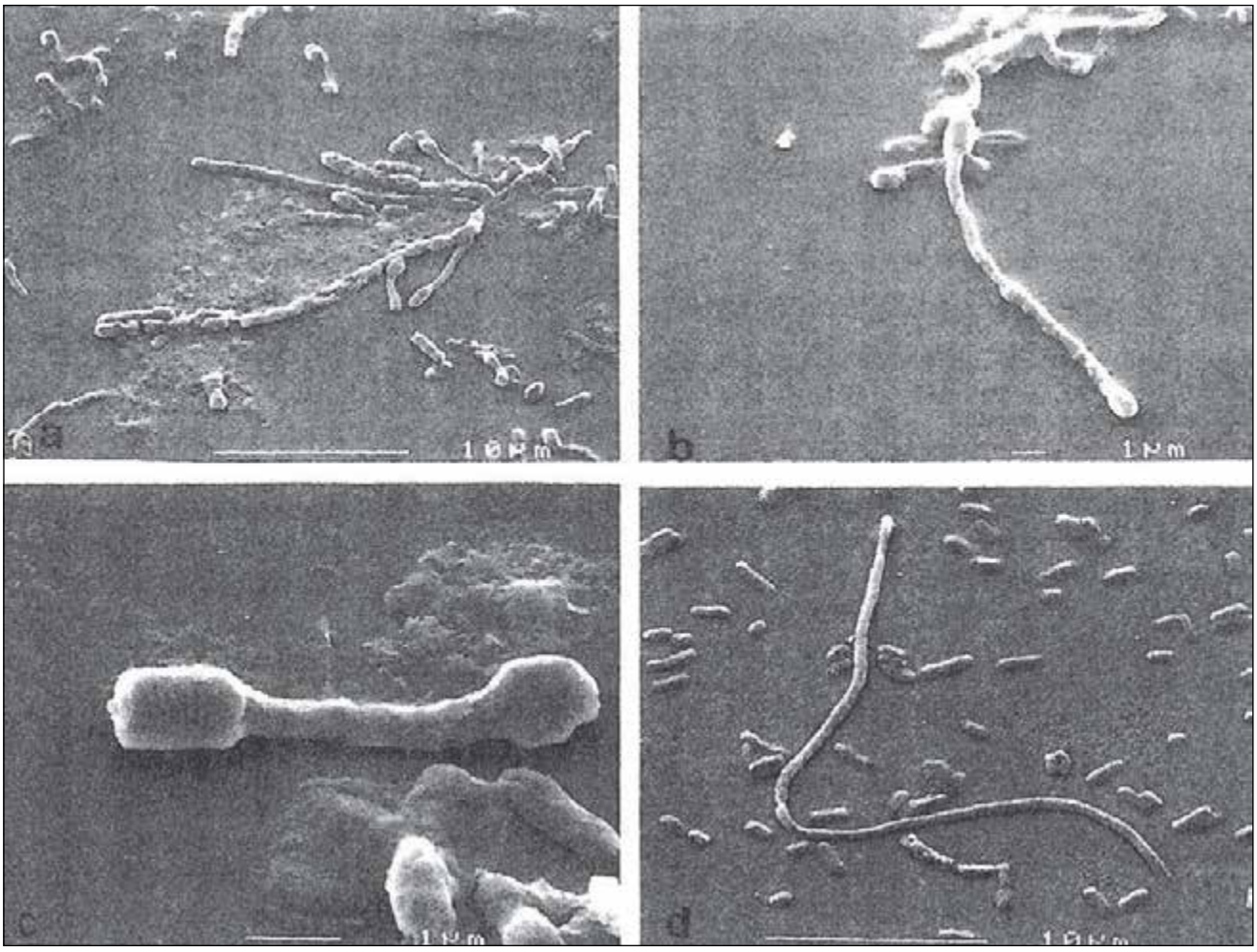
Illus. 2: Mycobacterium tuberculosis (gall.): 1. Formation of true branches, 2. Cross shape with bud, 3. Advanced growth similar to that of a fungus (from Kölbel, Z. Hyg. 144, 55, 1951).

["The Biology of Light"] by Prof. Popp shows this change of phase in diagrammatic form.

This change of phase in growth depends primarily on the level of nutrients available in the nutrient liquid. Where there is a high level of nutrients the individual cells of the fungus live very independently, whilst at the same time they are in constant contact with one another as a result of the exchange of chemical neurotransmitters. Where there is a lack of nutrients the concentration of neurotransmitters in the nutrient liquid increases and the individual cells consequently receive the signal to change phase and thus to combine in the fungal form. In this form, in which the individual cells also share their work, they can cope much more effectively with a lack of nutrients and energy. The fungal form is also the best form for reproduction. The fungal spores are additionally an ideal resting form which is very resistant to external influences.

One inspired discovery by Enderlein was that lower phases of development of fungi can break down the higher phases of development (bacteria, fungi) by coupling with them. This principle is very important for maintaining the balance of the growth phases and Enderlein himself found a therapeutic application for it, using remedies which contain preparations of low development phases of apathogenic fungi to break down pathogenic bacteria, fungi and yeasts. Isopathic SANUM remedies, most of which still contain Enderlein's original strains and/or are manufactured in accordance with his original instructions, work on this principle.

Most recently one type of change of phase in growth has also been proven by modern conventional microbiologists not only for fungi but also for bacteria. According to Prof. Wainwright from the University of Sheffield, after five days growing on artificial surfaces and under starvation conditions E. coli bacteria – which in culture normally grow in the form of crude rods – show gigantic, very



Illus. 4: Gigantic pleomorphic growth of E. coli in a starvation culture (from Wainwright et al., Letters in Applied Microbiology 29, 227-229, 1999)

pleomorphic growth with filamentous forms and strong branching (Illus. 4).

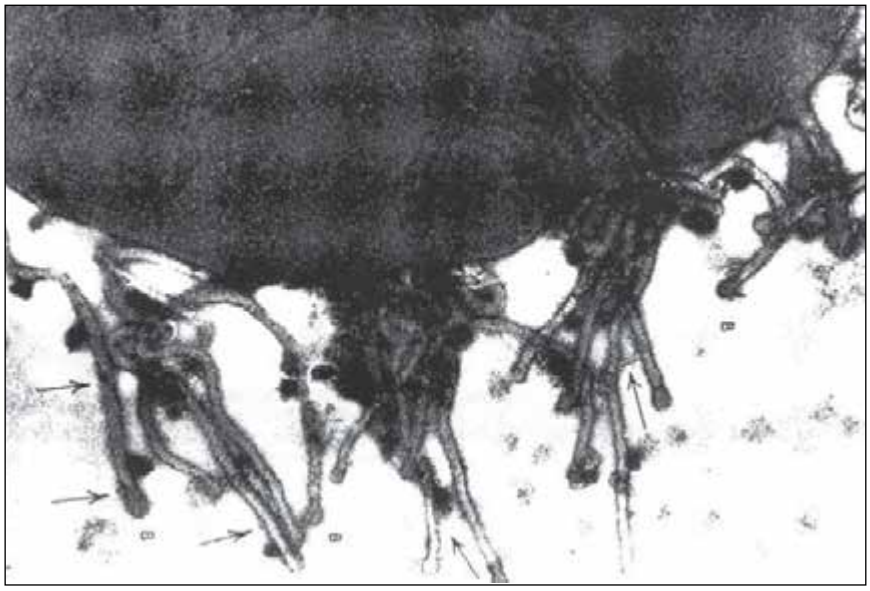
Bacteria which form spores, such as the Bacillus or Clostridium types, present one peculiarity. These micro-organisms need no fungal phase to be able to survive as resting forms.

Back in 1910 the famous Viennese doctor Dostal had remarked (in the Wiener medizinische Wochenschrift *[weekly Viennese medical journal], p.2100, 1910)*, "I am now tending to the view that tuberculin bacillae are the parasitic manifestations of particular moulds." According to Enderlein the tuberculin bacterium is an intermediate phase in the cyclogeny of the aspergillus fungus.

The change of phase in microbial growth can easily be tracked under the darkfield microscope. If a drop of freshly taken blood is placed on a specimen slide, covered with a cover slide and left to stand for a while, some time later bacteria can be seen leaving the red and white blood cells. A few days later, fungus-like structures develop in the preparation and these represent the final phase of the microbial growth. Illus. 5 shows a fungus-like "plasmalytic" form leaving an erythrocyte.

The important cause of the development of bacterial inflammations is a generalised or even localised excess of energy mostly as a result of a blockage. This blockage can be related to actual material, vital energy and/or the emotions. At the cellular level the body can excrete energy, the waste products of metabolism and toxins with the help of bacterial inflammation. Therefore, according to the Dr. Reckeweg's six-phase table of homotoxicosis, chronically recurring inflammations belong to the impregnation phase and thus to the initial cellular constitution phase to the right of the "biological cut-off" point.

If the organism does not manage to excrete in this way at the cellular level, the metabolism moves on to the degeneration phase and finally to the tumour phase. An increase in the imbalance of energy is characteristic of both these phases. As the connective tissue can no longer metabolise sufficiently because of blockades and excess acid, it becomes increasingly lacking in energy, and more and more energy is stored in the blood. As a result of this process more and more smaller bacterial forms develop which in the end no longer have need of any cell wall at all. These so-called cell wall deficient (CWD) bacteria were discovered by Enderlein almost 100 years ago and he gave a detailed description of their developmental cycles. He named the process of build-up of energy in the blood "endobiosis".



Illus. 5: The so-called "plasmalytic" microbial form leaving an erythrocyte as a result of maturation or heating (from Mattmann: "Cell Wall Deficient Forms – Stealth Pathogens", 3rd edition, CRC, 2001)

CWD forms of pathogenic micro-organisms are no longer sufficiently recognised by the immune system, which in turn strengthens the development of chronic diseases even more. The significance of CWD microorganisms has been described in detail in various SANUM Post articles (Volumes 51, 54, 55 and 56). CWD forms may also develop because of local congestion. In this context the problem of dead teeth and teeth which have been subjected to root canal treatment is important, as CWD forms maintain the chronic inflammation in these and can force the break up of tissues.

CWD forms of pathogenic bacteria are the important microbial cause of the chronic nature of illnesses in every case!

Mycoses develop predominantly in conditions where there is general or localised lack of energy, therefore by preference in extremely weak organs. Today these would be the intestine, whose function is greatly affected in particular by emotional strain and a diet which is inadequate and loaded

with allergens from cow's milk and hens' eggs (see Werthmann: "Ratgeber für chronisch Kranke und Allergiker" *["Advice for people who are chronically sick or have allergies"]*, obtainable from the Semmelweis Publishing House), the vaginal region and in particular the brain.

Three pairs of meridians – stomach/spleen and pancreas, liver/gall bladder and kidney/bladder – meet in the vaginal region. Blockages in one or more meridians (including overload during pregnancy) can lead to lack of energy in the lower abdomen and the development of vaginal mycoses.

The relationships described above have particular significance for diseases of the brain, which in energy terms is primarily included with the bladder meridian. When there is a strong build-up of energy on this meridian, first of all very small microbial structures, which over 100 years ago Béchamp named "microzymas" but which nowadays are commonly called "prions", are found in the central nervous system. They are probably very small phases of tuberculin bacteria and therefore (according to Enderlein) have a direct connection with the cyclode of the Aspergillus fungus. In animals these organisms are passed on mainly by feeding insufficiently heat-treated meal made from animal carcasses. As shown by investigations carried out by the German Milk Research Institute over the past few years, mycobacteria can even survive being heated to a higher temperature than pasteurisation (72 °C) in an atypical form.

Creutzfeld-Jakob disease (CJD) and Gerstmann-Sträussler-Scheinker syndrome (GSS) are two of the degenerative "prion-associated" diseases of the human central nervous system. In patients who had died of these diseases a positive reaction was found between an antiserum against the prion protein (PrP) 27-30 in the amyloid plaques of the brain and Aspergillus (Pfeiffer et. al., Acta Neuropathologica 84 (3), 346-347, 1992). According to investigations carried out by Drechsler (SANUM Post 54, 21-22, 2001) the "brain fungus", which can easily be tested for using kinesiology, appears to be a phenomenon basic to today's chronic illnesses.

<u>In conclusion</u>, it appears that growth of pathogenic bacteria in the living organism mainly occurs during a general or localised blockage of energy, whilst pathogenic fungi and yeasts reproduce predominantly when there is a general or localised lack of energy.

The Importance of Antibiotics and Antimycotics

Antibiotics are formed from the products of the metabolism of fungi. These substances suppress the reproduction of bacteria and at the same time the reproduction of other fungi as competitors for nutrition is hindered. This principal has been used by modern conventional medicine as a means to combat bacteria, although the resident fungal flora are strengthened by antibiotics. Consequently there is frequently found to be an increase in the number of fungi following treatment with antibiotics.

Treatment with antibiotics also has the fatal side effect that important routes for the metabolism in the human body can become blocked and also the development of cell wall deficient bacteria can be induced. Treatment with antibiotics therefore always includes the risk of the development of chronic diseases.

The long-term use of penicillin over many decades has resulted in the development of the Penicillium fungus as the strongest resident fungus alongside the tuberculin constitution, which was already known in Hahnemann's time some 200 years ago to be the strongest of the chronic diseases. In SANUM therapy for chronic diseases and bacterial and fungal infections, this fungus is therefore treated at the same time as the tuberculin constitution.

Antimycotics are substances which are supposed to hinder the growth and reproduction of fungi. Fungistatic substances like nyastatin, which do not destroy fungi and yeasts but only limit their growth and reproduction, are very common. One serious side-effect of antimycotics taken orally is that they are absorbed through the damaged intestinal mucous membrane (which we come across in most chronically ill patients today) and then can induce metabolism blockages, particularly of the liver and kidneys. As a result, the lack of energy which already exists is made even worse. Antimycotics which have a fungistatic effect can also induce cell wall deficient forms of fungi and yeasts. These organisms are still pathogenic; however, like cell wall deficient bacteria they can only be inadequately recognised and dealt with by the immune system.

In order to prevent any misunderstandings, let me say at this point that you should in no way avoid using antibiotics or antimycotics in serious or life-threatening diseases.

In many cases the strain on the human metabolism can be relieved by using them. However, the damage caused by these substances should finally be put right again using natural healing methods such as a course of SANUM treatment. In addition, in every case the energetic and emotional blockades must be regulated.

Basic Course of Therapy for Chronic Illnesses and Bacterial and Fungal Infections

As part of the basic course of therapy, regulation blockades must be dealt with, for example by means of holistic dental treatment. In addition the diet should be corrected by prescribing a diet according to Dr. Werthmann, without milk, eggs or pork, for a period of at least three months.

The basic course of therapy includes first of all correction of the milieu, in which the cell respiration and acid-base balance is regulated. Pathogenic microorganisms which are not cell wall deficient are broken down with the help of isopathic SANUM remedies, whilst cell wall deficient microbes are excreted with the help of specific SANUKEHL preparations. These preparations are also used in accordance with clinical experience; for example, SANUKEHL Pseu is not suitable only for the treatment of chronic Pseudomonas infections but also among other things for the treatment of allergies, asthma and burns.

The so-called "capsule cure" has proved itself for immune modulation. Here one capsule each of LATENSIN 6X, RECARCIN 6X, UTILIN 6X or UTILIN "S" 6X is taken in alternate weeks.

The SANUM excretion cure is used successfully as excretion treatment. This allows heavy metals, toxins and the waste products of the metabolism to be excreted and at the same time supports the function of the intestine and kidneys.

The treatment of chronic illnesses and bacterial and fungal infections using SANUM remedies is therefore made up of five parts:

- Correction of the milieu: SANUVIS, CITROKEHL, ALKALA N, injections of CHRYSOCOR
- The isopathic breaking down of pathogenic microbes:
  Bacteria:
  Over a period of one week: in the morning NOTAKEHL, in the evening PEFRAKEHL. Then over a period of several weeks: from Monday to Friday in the mornings MUCOKEHL, in the evening NIGERSAN; on Saturday and Sunday mornings NOTAKEHL, in the evenings PEFRAKEHL.
  Fungi and yeasts:
  Over a period of one week: in the evening EXMYKEHL. Then over a period of several weeks: from Monday to Friday in the mornings MUCOKEHL, in the evening NIGERSAN; on Saturday and Sunday in the evenings EXMYKEHL.
- The removal of pathogenic, CWD forms of microorganisms with the aid of specific SANUKEHL preparations, depending on the clinical and/or microbiological findings, e.g.
  SANUKEHL Myc -> mycobacteria
  SANUKEHL Pseu -> pseudomonas
  SANUKEHL Brucel -> borreliosis
  SANUKEHL Salm -> salmonella
  SANUKEHL Staph -> staphylococci, anthrax
  SANUKEHL Strep -> streptococci
  SANUKEHL Cand -> Candida mycoses
  SANUKEHL Trich-> skin mycoses
- Modulation of the immune system, e.g. using the "capsule cure": LATENSIN 6X, RECARCIN 6X, UTILIN 6X alternating weekly
- Excretion with the help of the SANUM excretion cure (see SANUM Post 55, 14, 2001); OKOUBASAN and USNEABASAN from Monday to Friday, alternating daily; LUFFASAN at weekends; plus MAPURIT at midday and ZINKOKEHL in the evenings. □

First published in the German language in the SANUM-Post magazine (58/2002)

Statistical Evaluation of an Application Study with SANUKEHL Salm 6X Drops

by Dr. Reiner Heidl

1. Introduction

A total number of 99 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1992 and May 2000 in an application study with the preparation SANUKEHL Salm 6X drops. The homeopathic test preparation, SANUKEHL Salm, consists exclusively of Salmonella enteriditis e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients were included in the study who had at least received one dosage of the medicament.

2. Participating Patients

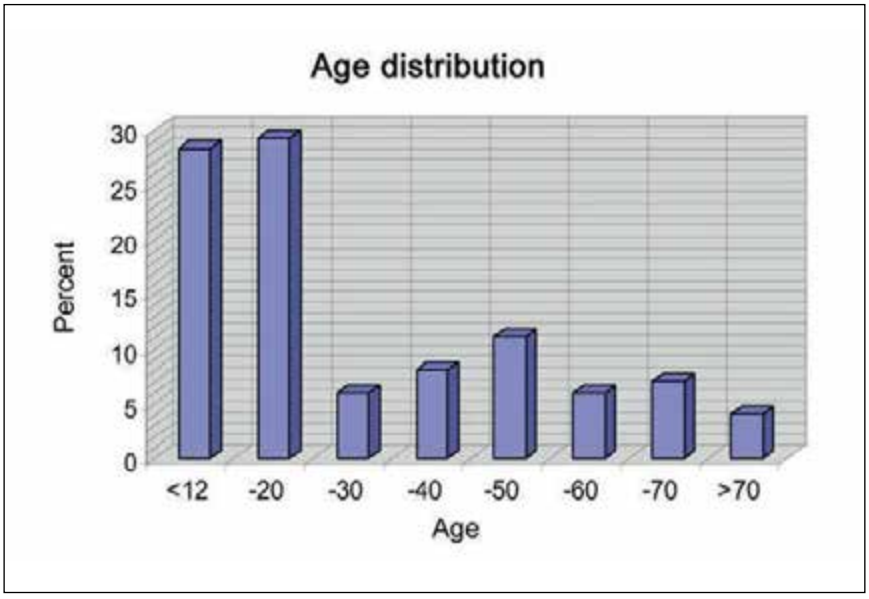
99 patients participated in the study, comprising of 49 men (49.5%) and 50 women (50.5%). The age of the patients varied between 6 and 80 years, with an average age of 37.7 and a standard deviation of 20.3 years. Almost the same number of patients was in the groups under 12 years (28.3%) and between 13 and 20 (29.3%). The groups between 21 and 30 (6.1%), between 31 and 40 (8.1%), between 51 and 60 (6.1%) and between 61 and 70 (7.1%) were also of comparable sizes. The group over 70 consisted of 4.0% and between 41 and 50 of 11.1% of the patients. In the age structure, the men with an average age of 31.1 ± 21.1 were on average 7 years older than the women with 24.3 ± 18.8 years.

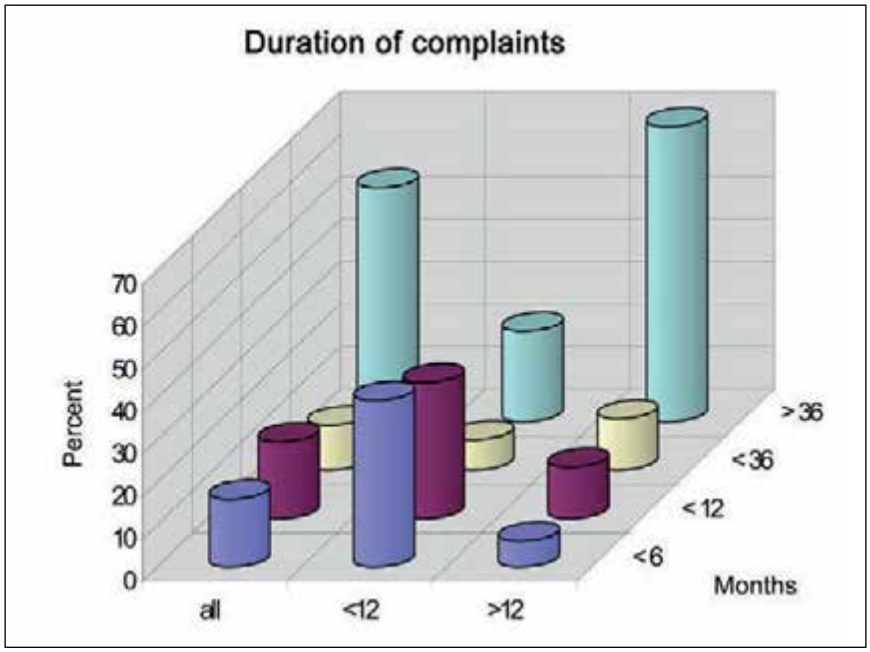
Height varied between 120 and 186 cm with an average height of 149.7 ± 20.1 cm. Weight varied between 20 and 95 kg with an average weight of 53.2 ± 18.3 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Salm 6X, according to Isopathy, is used in a very wide application range. The preferred application was independent of the patient's age. The main indications were tonsillitis, bronchitis, otitis media, as well as gastroenteritis and pancreatitis. A diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure for chronic diseases, the patients were asked in the study protocol how long they had endured the disease





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	16.0	39.9	6.1
< 12	18.1	32.1	12.1
< 36	10.6	7.1	12.1
> 36	55.3	21.4	69.7

or complaints. Time frames were given of less than six months, up to one year, up to three years and more than three years.

16.0% of the patients had suffered complaints for less than six months, 18.1% between six and 12 months and 10.6% between one and three years. More than half (55.3%) of all patients suffered for more than 36 months. The existence of the complaints was shifted more in the direction of acute conditions in the under 12 patients. Over 70.0% of these patients suffered for less than 12 months (39.9% less than 6 months and 32.1% between 6 and 12 months). Only 21.4% of these patients suffered over 36 months. A suffering period of over 36 months was especially pronounced in 69.7% in the adult group of patients over 12 years. Only 6.1% suffered from acute complaints with a duration of up to six months, whilst the share of patients with complaints between six and 12 months and one and three years was the same with 12.1%. All 99 patients included in the study had been treated with Sanukehl Salm 6X drops for the first time.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

According to the nature of an application study, the physician was not given a preset time limit for the final patient assessment. This final examination was conducted after a period of 13 to 1.863 days, with an average value of 176.3 ± 231.0 days.

Amongst the children under 12 years the therapy lasted 145.6 ± 394.3 days and was at the first sight comparable with the adult group with 188.4 ±161.4 days. The large scattering range in the group under 12 years was caused by only one patient with a therapy duration of 1.863 days. If this 'fugitive' was to be ignored, this would make a compact result of 82.0 ± 111.9 therapy days. This means that the acute complaints in the children group were treated for a shorter period. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that amongst the children under 12 years the therapy duration up to 50 days was clearly in the foreground in three quarters (74.1%) of all patients. Amongst the adults, the largest group with more than 150 therapy days was that with 47.9% of the patients.

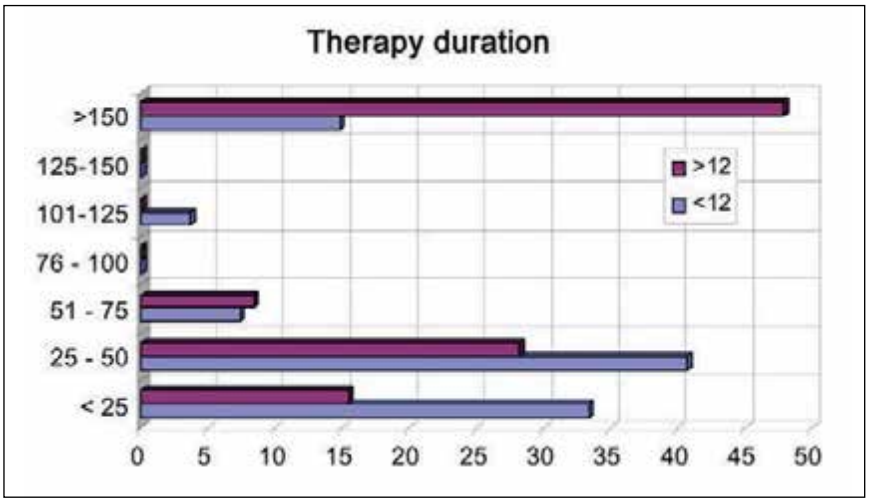
3.2 Dosage

The dosage was set as follows, according to the package insert:

Oral application: for acute conditions: 5 - 10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day.

External application: Every 1 - 2 days, 5 - 10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

All 99 patients took the drops orally and 22 patients were additionally treated externally. The following table states the medium dosage of the application forms. The drops are



related to the daily oral intake or external application respectively.

The recommended dosage was taken. In the group under 12 years, the drops for oral application were dosed according to age. The external application was the same dosage in the children and adult group. The medium dose in monotherapy was only insignificantly higher than in the combination therapy. There was no monotherapy for external application.

4. Efficacy and Tolerance

4.1 Evaluation of Efficacy by Doctor and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 41.4% of the patients thought efficacy to be "very good" and 50.5% "good", whilst only 8.1% assessed the efficacy with "moderate". The results of the physicians' evaluation for efficacy was similarly positive as that of the patients. The physicians evaluated efficacy in 46.5% of the cases as "very good", 39.4% as "good", 14.1% as moderate whilst neither patient nor physician assessed "no effect". The evaluation by physicians and patients alike was according to tendency better in the adult's group, as here was a tendency from "good" to "very good" in comparison with the children group.

Compliance (N = 96) was assessed by the physicians to be "very good" for 46 patients and "good" for 39 patients, hence 88.5% of all patients

Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	14.7 ± 6.4	3	20
Drops (topical)	6.8 ± 2.4	5	10

All Patients under 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	9.5 ± 4.7	3	20
Drops (topical)	6.7 ± 2.4	5	10

All Patients over 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	16.7 ± 5.7	5	20
Drops (topical)	7.0 ± 2.4	5	10

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	15.3 ± 6.3	5	20	Mono
Drops (oral)	12.3 ± 6.1	3	20	Combi
Drops (topical)	6.8 ± 2.4	5	10	Combi

participating in the study were given a “good“ or “very good“ compliance rating. 11 patients were given a “moderate” compliance rating and no patients were evaluated as “non-compliant”.

4.2 Evaluation of Tolerance by Doctor and Patient

At the conclusion of the study, an evaluation of tolerance was submitted by the physicians and patients, whereby an assessment of “very good“, “good“, “moderate“ and “poor“ could be chosen. 64.9% of patients and 61.6% of physicians rated the tolerance to be “very good”, whilst 32.0% of patients and 38.4% of physicians gave SANUKEHL Salm 6X a “good” tolerance rating. Only 3.1% of the patients rated it “moderate”. No case was assessed as “poor“ with the patients and physicians alike.

In the children’s group under 12 years, the physicians rated the tolerance with “very good” and “good“ which was a little better than in the age group over 12 years. In the younger age group, the assessment shifted a little more from “good“ to “very good“, and additionally in this age group no case was assessed with “moderate“ and “poor“ by the patients.

4.3 Side Effects and Discontinuation of the Therapy

No patient discontinued the therapy with SANUKEHL Salm 6X and no side effects were reported.

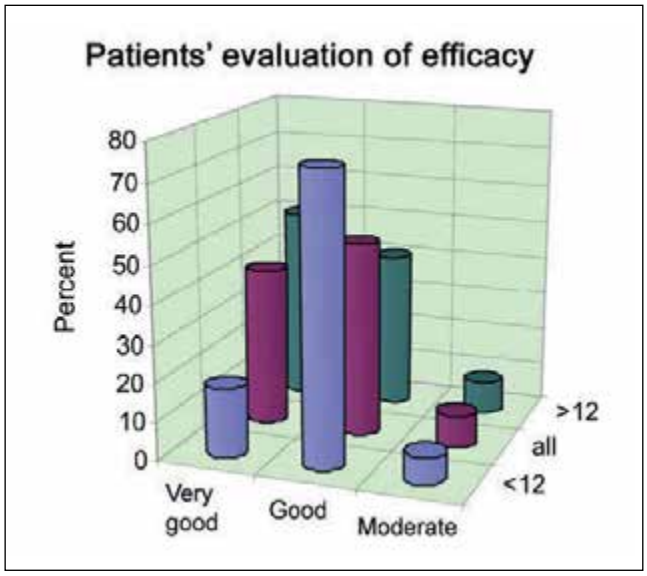
5. Summary

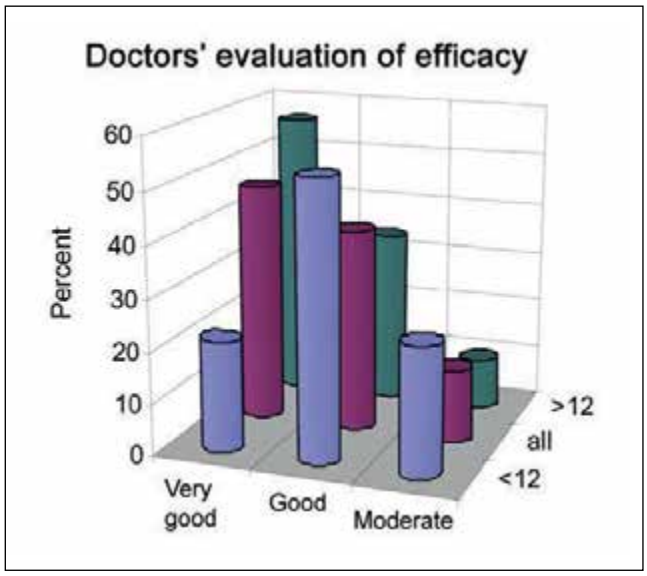
A total number of 99 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1992 and May 2000 in an application study with the preparation SANUKEHL Salm 6X drops. The homeopathic test preparation, SANUKEHL Salm, consists exclusively of Salmonella enteriditis e volumine cellulae in the 6th decimal potency.

SANUKEHL Salm 6X was used in a very broad application range in accordance with Isopathy, whereby the preferred application was independent of the patients’ age. The main indications were tonsillitis, bronchitis, otitis media, as well as gastroenteritis and pancreatitis. Accompanying therapies were to be documented in the evaluation form.

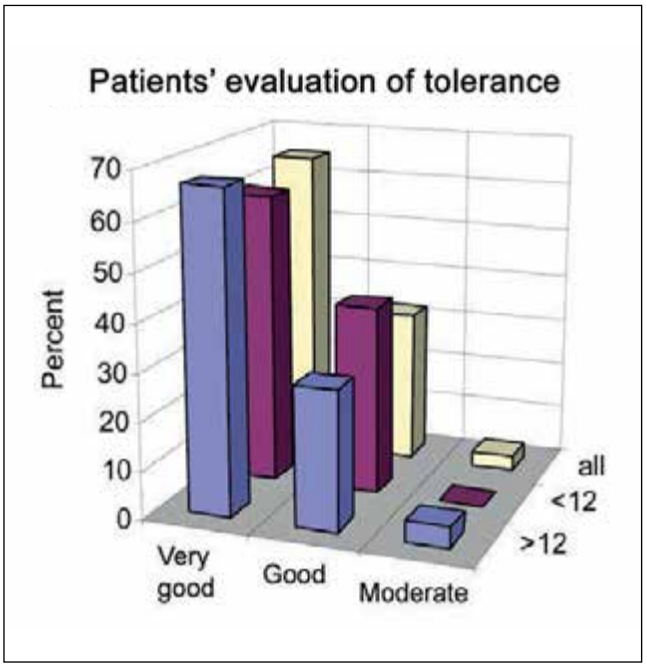
Amongst the children under 12 years, the therapy lasted with 145.6 ±

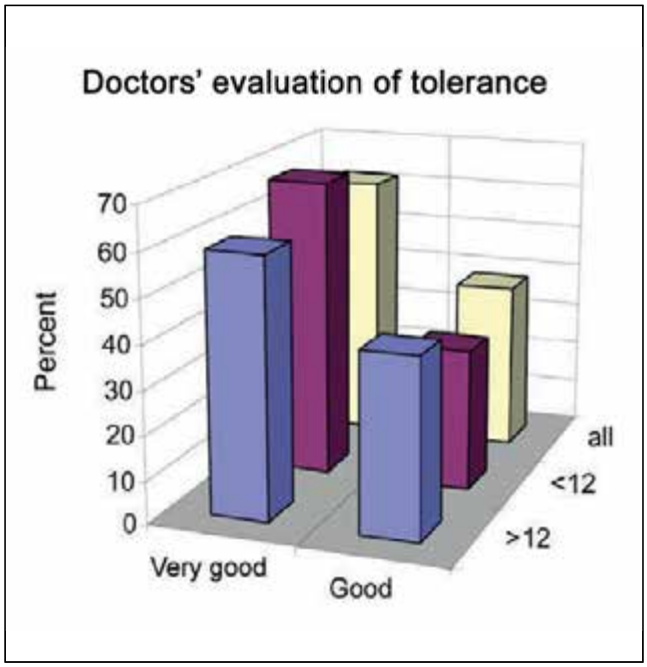
Evaluation of Efficacy								
Patient group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	41.4	50.5	8.1	0	46.5	39.4	14.1	0
< 12 years	17.9	75.0	7.1	0	21.4	53.6	25.0	0
> 12 years	50.7	40.8	8.5	0	56.3	33.8	9.9	0





Evaluation of Tolerance								
Patient group	**Patients' evaluation [%]**				**Doctors' evaluation [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	64.9	32.0	3.1	0	61.6	38.4	0	0
< 12 years	60.7	39.3	0	0	67.9	32.1	0	0
> 12 years	66.7	29.0	4.3	0	59.2	40.8	0	0





384.3 days and was at first sight, comparable with the adult group with 188.4 ± 161.4 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the children under 12 years, the therapy duration up to 50 days (three quarters of all patients) was clearly in the foreground (74.1% of all patients). Amongst the adults, the largest group with more than 150 therapy days was that with 47.9% of the patients.

All 99 patients took the drops orally and 22 patients were additionally treated externally. The recommended dosage was taken. In the group under 12 years, the drops for oral application were dosed according to age. The external application was the same in the children and adult group. The medium dose in monotherapy was only insignificantly higher than in the combination therapy. There was no monotherapy for external application.

All 99 patients included in this study had not been previously treated with SANUKEHL Salm 6X drops.

The therapeutic progress was determined by evaluations conducted respectively at the beginning and the end of the therapy. 91.9% of the patients and 85.9% of the physicians rated the efficacy of the therapy as "very good" and "good". The evaluation by physician and patient was better in the adult's group, as here was a shifting from "good" to "very good" in comparison with the children group. For 88.5% of all patients participating in the study, compliance was certified to be "good" or "very good".

64.9% of patients and 61.6% of physicians rated the tolerance to be "very good", whilst 32.0% of patients and 38.4% of physicians gave SANUKEHL Salm 6X drops a "good" tolerance rating. Only 3.1% of the patients rated it "moderate". Neither patients nor physicians assessed the tolerance with "poor". No therapy was discontinued and no side effects occurred. □

First published in the German language in the SANUM-Post magazine (91/2010)

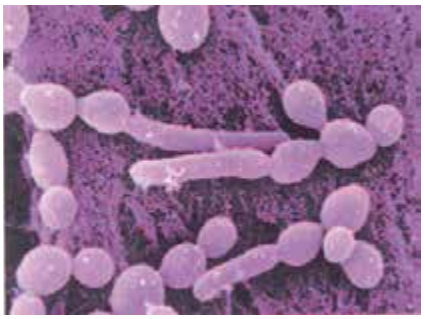
Cell Wall Deficient Forms of Candida

How They Occur, Their Significance and how to Regulate Them Using Naturopathic Methods

by Dr. Dr. Peter Schneider

In a similar way to bacteria (see the article "SANUKEHL Preparations for the Excretion of Cell Wall Deficient Bacterial Forms – a Specific Extension of Isopathic Therapy in SANUM Post No. 54, 2001), yeasts too can exist in cell wall deficient (CWD) forms. In these forms there is no cell wall but only a cell membrane. Such forms are of particular importance for candida, as these yeasts can also be pathogenic in candida mycoses in the CWD form and the immune system can no longer recognise or remove the organisms adequately.

However, the development and reproduction of the cell wall deficient forms of bacteria and candida occur under completely different conditions. Whilst bacteria need very energy-rich environmental conditions to be able to live as CWD within erythrocytes or leucocytes, cell wall deficient forms of candida arise primarily as "stealth forms" under conditions of general or localised lack of energy (Mattman, 2001). Even after colour stains (brilliant green) or antimycotics have been added to a culture, candida grows only as a cell wall deficient form. The following illustrations show on the left an electron microscope photograph of candida (magnified 9480 times) and on the right the growth of transitional forms of candida from the original thin filaments in a culture



with brilliant green (magnified 1000 times; Mattman, 2001). The yeasts on the right hand picture are hardly recognisable as such.

Even back in 1956 investigations in Hungary had shown that brewer's yeasts (Saccharomyces cerevisiae) can grow in cell wall deficient forms. Later it was recognised that in about 50% of cases candida too can grow spontaneously as CWD in synthetic culture mediums in the laboratory. However, if blood serum is added to the synthetic mediums, cell wall deficient forms of candida can no longer be detected. As a result of the serum, sufficient protein and energy once again becomes available to the yeasts so that they are able to reproduce in the classic form with cell walls.

Candida are pathogenic not only in their classic yeast forms but also as CWD. If CWD candida is injected into laboratory animals, the result is very serious systemic candidiasis with endocarditis and mycohaemia (Mattman, 2001).

The following table shows the energetic relationships as calculated about 50 years ago by the French hydrologist Claude Vincent in his description of milieu relationships (BEV) in times of health and illness (from Elmau, 1985):

Ideal values					
	pH	**rH_2**	**E**	**r**	**Result (µW/cm²)**
Blood	7.10	22	234	210	261
Saliva	6.50	22	270	140	521
Urine	6.80	24	312	30	3245
Strongly pathological values					
	pH	**rH_2**	**E**	**r**	**Result (µW/cm²)**
Blood	7.50	25	300	121	744
Saliva	7.25	26	345	310	284
Urine	4.80	19	282	127	626

As this examination of the energy shows, a great deal of energy is used in a healthy metabolism (upper part of the table), however most of this is excreted again in the urine.

In a metabolism which is altered as a result of illness (lower part of the table), a great deal of energy is stored in the blood (Enderlein called this a “tendency towards congestion“). This lapse is essentially characterised by a rise in the redox potential (“redox rigidity“), the cause of which lies in a disturbance of the cell respiration. At the same time the metabolism is so strongly affected in the area of the connective tissue and the excretory organs that the energy of the blood can no longer be utilised. As a result the acid-base balance of the connective tissue shifts and becomes more acid, whilst to compensate the pH of the blood rises as a result of the mobilisation of the alkali reserves. As the renal function also becomes weaker and weaker, less and less minerals are excreted, and this leads to an increase in the concentration of minerals and thus also in the conductivity of the blood. For this reason chronically ill patients are literally starving whilst at the same time there is excess energy in their blood. The energy-rich milieu conditions of the blood are ideal conditions for the reproduction of cell wall deficient forms of bacteria and viruses, but not for candida.

Some Major Causes of the Development of Candida Mycoses

Cell wall deficient forms of candida can reproduce particularly well in those organs which have a poor supply of energy or in which the energy metabolism is badly disrupted. Consequently there is a predilection for CWD like this to develop in the bowel, which nowadays (according to Werthmann) is the main “weak organ“ within the human body. Vaginal mycoses can occur in isolation or together with intestinal mycoses, and they often point to a situation where there is a lack of energy (partner problems) in this area.

Local candida mycoses can be found just as frequently. They occur where there is a lack of energy in the local area, e.g. because of a blockade of a meridian. So, for example, mycoses of the big toenail are often seen in disorders of the spleen-pancreas meridian.

The long-term use of medication such as antibiotics and corticosteroids can also change the energy in the milieu so strongly by inducing a redox blockade that this provides the appropriate conditions for the candida to reproduce.

Nowadays emotional and dynamic blockades are the main causes of meridian disorders. In particular, emotional blockades are frequently not taken sufficiently into account, although in the meantime they have become important factors in today’s living and working conditions. At the same time it is primarily those meridians which have a direct connection to Gaia, Mother Earth, which are affected, namely stomach-spleen/pancreas (earth) and kidneys-bladder (water).

According to Dr. Rau, emotional blockades of the stomach meridian are strongly linked to an excess of energy and unresolved problems with the parent of the opposite sex; because of the function of the spleen as the entrance portal into the body for vital energy, the spleen-pancreas meridian has a connection to the energy which is taken in through nutrition, air, water and one’s environment. In a similar way, the energy which is given to a newborn infant on its path through life (“original chi“ or “prenatal chi“) has a connection to the kidneys-bladder meridian.

Earth	
Spleen / Pancreas	*Stomach*
Low self-esteem Self-punishment, over-anxiousness and dependency, living through others, "not good enough", not being able to disassociate oneself, feeling oneself to be disapproved of, not being able to part with things	*Not wanting to do anything* Helpless, broken spirit, overburdened, overtaxed, resentful, hating, unenthusiastic, disinclined, obsessed, not being able to process ("digest") things, "Something's preying on my mind"

Water	
Kidneys	*Sexual organs / Bladder*
Angst Feeling of guilt, powerlessness, demoralised, egoistic, disappointment, brutal and lacking in sympathy, scared, hurt, "Things are getting me down"	*Being ashamed* A paralysed will, unfulfilled longing for love, feeling hurt, impatience, self-pity, fear of standing on one's own feet, being offended

Sexual problems are often linked to blockades of these two pairs of meridians.

According to psychokinesiology (Klinghardt, 1999), the following emotional relationships result from these meridians:

Other important causes of the blockade of energy in the energy metabolism are disorders of the bowel and teeth. The wrong type of diet or lack of food can lead to failure in the function of the bowel and mucous membranes (Werthmann, 1998).

Progressive destruction of the mucous membrane with dysbiosis of the micro-organisms can lead in the end to “leaky gut syndrome“. This means that the intestinal mucous membrane becomes permeable, allowing chemicals, bacteria, fungi and parasites to pass through, and can no longer reabsorb or excrete sufficiently. Alongside emotional causes, it is above all a diet which includes proteins from cow’s milk and hens’ eggs which initially leads to chronic inflammation of the mucous membranes and finally afterwards to degeneration (atrophy). As the greater part of the immunologically active tissue is to be found in the area of the intestine, a chronic functional disorder of the intestinal mucous membrane always results in trouble with the immune function.

The energy meridians which supply the stomach and bowel also have a strong link with the teeth, particularly the molars (teeth nos. 5 to 7). If these meridians are blocked by dead teeth, root treatments or dental granuloma, this has a direct effect on the supply of energy to the internal organs.

One other very important influence on the teeth comes from pollution with heavy metals from dental fillings. In this way mercury can be deposited in the cells of the nervous system, the kidneys and also the large intestine, and there it blocks important mechanisms in the energy metabolism. Therefore the homeopathic remedy picture of Mercurius also shows links with those organs named above in particular.

Exposure to heavy metals is often a problem in children, as they can be passed on by the mother through the placenta or in the mother’s milk.

Conventional Therapy with Antimycotics

Antimycotics are prescribed systemically or locally for the conventional treatment of candida mycoses. Antimycotics work primarily as fungistatics and to a lesser extent as fungicides.

Broad spectrum antimycotics such as nystatin or amphotericin B react with sterins in the cell membrane of yeasts. Consequently the molecules are arranged in water-filled channels, and there follows a loss of sugars, ions, amino acids, nucleic acids, etc. This mechanism explains the selective effect of these antimycotics on yeasts and fungi, as the membrane of human and animal cells contains cholesterol but no sterins.

Imidazol derivatives such as clotrimazol work as fungistatics or fungicides by restricting the conversion of lanosterol to ergosterol (an important part of the cell membrane) and cause damage directly to the cell wall.

Consequently the effect of antimycotics is primarily not to kill off the candida but to convert the form of candida with cell walls into a low-energy CWD form. However, as important mechanisms of the immune system are directed towards the cell wall of microorganisms, the use of antimycotics means that the candida which are still pathogenic can still be recognised by the immune system, although only in a limited way. Therefore a course of therapy with antimycotics can actually relieve the strain on the metabolism and improve the clinical symptoms, but at the same time it does not rectify the shift in the milieu.

Where the intestinal mucous membrane is intact, antimycotics which have been taken orally are not reabsorbed from the intestine. However,

this mucous membrane is very permeable in chronically ill patients who have candida mycosis. As a result, in patients like this, antimycotics can strengthen the metabolism blockages and weaknesses which are present anyway. This means that the use of antimycotics can lead to irreversible damage to the lysosomal membranes in the renal tubular cells, suppression of the bone marrow, nausea, high temperature, shivering fits and anaphylactoid reactions, or even in rare cases to neurotoxic and hepatotoxic effects.

Therefore antimycotics should only be used in emergency, e.g. for systemic mycoses. Finally the damage caused by this treatment should be remedied using naturopathic methods.

The Relationship between Candida and Heavy Metals

Candida has a very close relationship to exposure to heavy metals (Rau, 1998): on the one hand, heavy metals block cell respiration so that the milieu becomes low in energy and yeasts are easily able to multiply in it; on the other hand, candida bonds with heavy metals and excretes them from the body. In the process, the heavy metals form a chelation with particular peptides (2 – 11 amino acids) which are known as "phytochelatins" and which are to be found not only in candida but also in algae, lichens and many plants. Therefore remedies made from these plants (e.g. USNEABASAN, LUFFASAN) are also used to promote the excretion of heavy metals.

If, however, candida mycoses are treated with antimycotics, it follows that not only the cell wall synthesis but also the amino acid metabolism in the yeasts is hindered. As a result, their ability to excrete heavy metals is greatly reduced.

Treating Candida Mycoses with SANUM Remedies

A course of treatment of mycoses with SANUM products is very successful as long as the metabolism is also able to implement this regulation. As a result of the therapy, fungi and yeasts are broken down and excreted from the body. However, as cell wall deficient forms of candida need a milieu which is very low in energy in order to reproduce, a successful course of therapy usually also requires a form of energy treatment.

The treatment of candida mycoses in adults using SANUM remedies includes the following:

- A SANUM excretion cure designed to promote the excretion of the waste products of metabolism, toxins and heavy metals:
  From Monday to Friday: 5 – 10 drops of USNEABASAN alternating on a daily basis with OKOUBASAN 2X, to be taken in the morning;
  Saturday and Sunday: 1 – 2 tablets of LUFFASAN 4X each day (see also SANUM Post No. 54, 2001, page 18); plus from the start 1 capsule of MAPURIT at midday and 12 drops of ZINKOKEHL 3X in the evening.

  This excretion must take place over a longer period of several weeks to months; at the same time the metabolism for magnesium and zinc is regulated. As this excretion functions very efficiently, low doses of the remedies LUFFASAN and USNEABASAN should be taken to begin with. In addition, to promote excretion, the patient should keep to a diet as recommended by Werthmann with no milk, eggs or pork. Excretion can also be improved by drinking large amounts of good water each day; the energy level of this water should be enriched by the use of a HAKAKEHL-Plus energy plate (lay the plate under the water with the printed side uppermost).
- Correction of the milieu:
  1 measuring spoonful of ALKALA N in the morning; 60 drops of SANUVIS 3 times a day, alternating on a daily basis with 10 drops of CITROKEHL 3 times a day.
- Isopathic breakdown of forms of candida with cell walls:
  1 EXMYKEHL 3X suppository per rectum (even in cases of vaginal mycoses) in the evening; for vaginal mycoses additionally promote the circulation in the pelvic region e.g. by hot foot baths.
- Specific immune stimulation with SANUKEHL Cand (this preparation stimulates the immune system specifically against cell wall deficient forms of candida):
  Take 4 drops of SANUKEHL Cand 6X drops and rub 4 drops into the inside of the elbow each evening.
- "Capsule cure" for general modulation of the immune system:
  1 capsule of alternately LATENSIN 6X, RECARCIN 6X or UTILIN 6X to be taken once each week.

In children this course of therapy is carried out in a simpler form because they are better able to regulate:

- Take FORTAKEHL 5X drops, PEFRAKEHL 5X drops and ALBICANSAN 5X drops alternating on a daily basis, the dose being the

number of drops equal to the number of years of age, with the adult dose of 8 drops being given from age 8 onwards.

➢ 1-2 drops of RECARCIN 6X and UTILIN 6X alternating on a daily basis, rubbed into the inside elbow.

➢ Diet according to Dr. Werthmann with no cow's milk, hens' eggs or pork; drink good water, possibly energised with HAKAKEHL-Plus energy plates.

In general, medicinal excretion therapy should not be carried out during pregnancy and breastfeeding. In children, because of the stage of maturity of their central nervous system, medicinal excretion of heavy metals should, where possible, not be carried out before their 8th birthday and preferably only when they reach their teens.

Both children and adults should continue with Dr. Werthmann's diet for a period of at least three months. Refined sugar should also be excluded from the diet. A diet which is totally free of sugar is not advisable, as otherwise the candida will take its nutrition from the carbohydrates in the cells of the mucous membrane.

The therapy is most effective when combined with holistic methods to remove emotional and energy blockades of the meridians (e.g. holistic dentistry, psychokinesiology, acupuncture, acupuncture massage and classical homeopathy). □

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First published in the German language in the SANUM-Post magazine (55/2001)

The Remedy SANUKEHL Serra

Its Working Principle Serratia marcescens

by Joachim Hartmann (Ph. D., Biology)

Different types of Serratia are a natural phenomenon in water, soils and foodstuffs. Serratia marcescens is noticeable by the formation of a deep red dye, prodigiosin. This bacterium was earlier known as “Chromobacterium prodigiosum“ or even “Host *[communion wafer*] fungus“ and is an enterobacterium.

These types of human microflora can lead to serious endogenous diseases; therefore they are described as being facultatively pathogenic or known as opportunistic pathogens. A disease can only develop under certain pre-conditions specific to the patient. Favourable factors include:

- myelosuppression caused by x-rays or cytostatic therapy,
- suppression of the activation of thymus lymphocytes caused by corticosteroids,
- immune deficiency syndrome,
- frequent use of broad spectrum antibiotics (selection of the enterobacteria as a result of lack of natural antagonism by the anaerobic intestinal flora).

Endogenous infectious diseases do not have a typical incubation period or tendency to spread and possibly no immunity develops to them. Opportunistic pathogens are frequently involved in the following diseases:

- enteritis,
- urinary tract infections,
- wound infections following surgery,
- peritonitis,
- cholecystitis,
- pneumonia,
- meningitis,
- sepsis.

Serratia marcascens is an opportunistic pathogen typically seen in hospitalised patients. Over the past three decades it has been diagnosed with increasing frequency as the pathogen responsible for nosocomial infections (i.e. infections acquired in hospital) and has been isolated particularly in bladder, respiratory tract and wound infections as well as in cases of sepsis. A particular cause of sepsis are contaminated infusion solutions, whilst diseases of the urinary tract and lungs occur when patients are catheterised. The problem with the classic treatment using antibiotics is that there is a high level of natural resistance to the penicillins, cephalosporins and polymyxin B caused by plasmid-coded multiple resistance which can be transferred to the different species of enterobacteria.

Polyribosomes were isolated from Serratia marcescens, tested by means of intradermal injections on fibrosarcomas in mice and compared with remedies derived from Escherichia coli, BCG, Propionibacterium acnes, Mycobacterium smegmatis and Streptococcus pneumoniae. This showed that the remedy derived from Serratia marcescens had a superior effect with regard to suppression of tumours. In this connection, activation of the macrophages by the use of Interferon was discussed.

Above all, the macromolecules which were obtained by extraction from the lipopolysaccharide layer of the cell wall showed in vitro

- a strong activation response in the polyclonal B-cells (mitogenic activity)
- induction of synthesis of the tumour necrosis factor.

For more on the use of a preparation from Serratia marcescens in the treatment of cancer see the article “Coley’s Toxin in the treatment of cancer“ in one of the coming editions of SANUM-Post.

In Holland a hapten preparation has been registered in the form of the remedy SANUKEHL SERRA for internal and external use as well as in a 5X injection form for intramuscular and subcutaneous use.

Treating cancer with “Coley’s toxin“

“Coley’s toxin“ is one of the most interesting bacterial remedies used in oncological therapy. The American surgeon William B. Coley developed this remedy due to an observation that he made in 1891 in the case of a patient with inoperable sarcoma. Following his fifth operation

for cancer the patient developed a severe erysipelas infection on the face and neck. Within a few days the tumour began to soften and its diameter began to shrink. The patient left the hospital without showing any signs of having a tumour and eleven years later was in the best of health without any sign of a relapse. Following this Dr. Coley began to inoculate his patients' tumours with an artificial cultivation of streptococci which had been isolated from erysipelas. Not all patients went on to develop erysipelas, however, all of them presented with a reversal in the size of the tumour and an accompanying high fever. But the risk of this form of treatment was considerable. Some patients died from the toxic effect of the increasing numbers of microbes.

Around 1895 Dr. Martha Tracy discovered that sarcomas in dogs could be made to disappear by injection of a "Bacillus prodigiosus" toxin. Dr. Coley then brought together the working principles of Streptococcus pyogenes (from erysipelas) and Serratia marcescans (the modern name for Bacillus prodigiosus) in his mixed bacterial vaccine (MBV). He standardised the bacterial remedies to safe concentrations of the proportions of the bacteria and from then on only used the heat-sterilised form of the remedy. In 1909 he published case reports on 36 sarcoma patients who had experienced complete or partial remission through treatment with Coley's toxin.

Interestingly, the first observations that malignant diseases can be improved or cured during or following a bacterial infection go back over 200 years. The first recorded findings date from DUPRE DE LISLE (1774), and there are extensive reports by TANCHOU (1844). In Germany the results of the oncological effects of erysipelas diseases were published by BUSCH from Cologne (1886) and BRUNS from Bonn (1887).

Helen Coley-Nauts, the daughter of William Coley, carried out some extraordinarily comprehensive research in order to document the positive effects of bacterial infections on the course of cancer illnesses from medical literature in general as well as the results of treatment with Coley's mixed bacterial vaccine in particular. Her research led her to over 1000 quotations in literature dating from 1775 to 1980. The spontaneous remissions most frequently reported occurred after streptococcal infections, those which were next most frequent after pyesis and/or abcesses caused by staphylococci (NAUTS, 1980).

Of 449 inoperable patients with mostly pyogenic infections, 125 survived long-term (from 5 to 54 years). This corresponds with tests that prove that TB patients are less susceptible to cancer. The same applies to new cases of malaria. There are reports of cancer cures as a result of vaccination against syphilis. Vaccination of patients with acute leukaemia with Pseudomonas led to them remaining in remission longer during chemotherapy.

An analysis of just under 900 patients who were treated with Coley's mixed bacterial vaccine (MBV) gave the following results (NAUTS, 1978); see table:

- Of 896 patients, 46 per cent of inoperable cases survived for five years or more;
- the same applies to 51 per cent of operable cases;
- of 126 patients with osteogenic sarcomas, 85 per cent survived for between 4 and 60 years after the operation, compared to 10 to 15 per cent after a sole operation.

When mixed bacterial vaccine was prescribed, the most dramatic regressions of tumours were in patients where acute feverish reactions were recorded, in treatment lasting at least four months. None of the therapists offering the MBV treatment during Coley's lifetime knew anything about the physiological effects of bacterial vaccines:

- stimulation of the reticuloendothelial system;
- activation of the macrophages;
- strengthening of haematopoiesis;
- an increase in the production of prostacyclin, interferon and endorphins.

Nowadays the far-reaching effects of these individual effects are well known and they explain the regression of large tumours, the metastatic prophylaxis, the pain relieving effect, the improvement in the blood count, appetite and weight and the regeneration of bones in the patients treated.

Moreover, in cases of fever which is artificially created by injection of bacterial endotoxin, it can be proved that the stimulation of the immune response is accompanied by raised levels of the following messenger substances which can be regarded as useful in resistance against tumours: interleukin-1 and -2, interferon-γ and the tumour necrosis factor.

It is recommended as a matter of urgency that bacterial vaccines should be used before every surgical operation or session of radiation or hyperthermia treatment (NAUTS, 1982).

Five-year survival rates of 896 patients with various tumour disorders who were treated with Coley's toxin

Type of tumour	Total no. of cases	Five year survival rate			
		inoperable number	(%)	operable number	(%)
Bone tumours					
Ewing's sarcoma	114	11/52	21	18/62	29
osteosarcoma	162	3/23	13	43/139	31
reticular cell sarcoma	72	9/49	18	13/23	57
multiple melanoma	12	4/8	50	2/4	50
giant-cell tumour	57	15/19	79	33/38	87
Connective tissue					
lymphosarcoma	86	42/86	49	---	---
Hodgkin's disease	15	10/15	67	---	---
other sarcomas	188	78/138	57	36/50	73
Gynaecological tumours					
breast cancer	33	13/20	65	13/13	100
ovarian cancer	16	10/15	67	1/1	(100)
carcinoma of the cervix	3	2/3	67	---	---
sarcoma of the uterus	11	8/11	73	---	---
Other tumours					
cancer of the testes	64	14/43*	34	15/21	71
malignant melanoma	31	10/17	60	10/14	71
colorectal cancer	13	5/11	46	2/2	(100)
renal cancer (adult)	8	3/7	43	1/1	(100)
renal cancer (Wilms tumour)	3	---	---	1/3	33
neuroblastoma	9	1/6	17	2/3	67
Total	**896**	**238/523**	**46**	**190/374**	**51**

* including 16 terminal cases

Probably the most recent test of Coley's MBV took place in a study on the treatment of 15 patients with metastatic malignant melanoma (KÖLMEL et al., 1991). The authors reported three cases of complete remission, some of which lasted for over 26 months, as well as impressive retrogression of larger skin tumours even in the progressive cases. Also mentioned were the minimal side effects of the therapy.

Tests on the cell walls of Staphylococcus aureus showed that one component (protein A), which reacts with the Fc regions of immunoglobulins, can bond with immune complexes in the serum of the patient. This is regarded as important for the removal of blockading factors which can inhibit immune reactions in the plasma (FORSGREN & SJÖQUIST, 1966). This led to a form of treatment of extra-corporeal immune adsorption of patient serums using Staphylococcus aureus protein A (BANSAL et al., 1978; RAY et al., 1979-1982).

At this point there ensues an informal cross-reference to the newly-developed series of SANUKEHL remedies from SANUM-Kehlbeck. In these remedies the bacterial components in particular are con-

centrated as a result of the choice of manufacturing process and these have, for example, laid the foundations for the effectiveness of the Coley toxin (used in the single remedies SANUKEHL STREP and SANUKEHL SERRA). Furthermore, the investigations of KUNZE et al. (1996) on SANUKEHL PSEU show that the ex vivo immune adsorption technique which was developed with Staphylococcus aureus remedies also functions as it were in vivo in the patientís blood and can offer a reason for SANUKEHL PSEU being able to remove reaction blockades which are very frequently found in, for example, cancer patients. □

First published in the German language in the SANUM-Post magazine (43/1998)

The Application of SANUKEHL Serra in the Treatment of Restless Legs Syndrome and Multiple Sclerosis

by Dr. rer. nat. Cornelia Arnoul (Naturopath) and Franz Arnoul (Naturopath)

The SANUKEHL preparations manufactured by SANUM-Kehlbeck contain specific polysaccharides from the cell membrane of microbes (Schneider P.; 2001).

Due to their small molecule size they act as haptens or antigen absorbers in the organism (Cornelius, P.; 2001). In many cases the pathogenic toxins remain in the body even after the abatement of the infection and strongly compromise the function of the immune system. Conjugated antigens develop by bonding of the toxins to the haptens contained in the SANUKEHL preparations. By activating the T-lymphocytes they can trigger an immune response. Thus the organism eliminates bacterial or fungal toxins.

The active agent of SANUKEHL Serra consists of cell membrane components of the bacteria type Serratia marcescens, an opportunistic pathogen with hospitalised patients (Hartmann, J.; 1998). During the last few years this Serratia type was diagnosed more and more frequently as trigger of nosocomial infections, i.e. infections acquired in the hospital, and isolated mostly in infections of the urinary tract, the respiratory tract or wounds, as well as in sepsis. Practice experience lets us assume that serratia toxins play a very significant role in different affections of the nervous system. Therapeutical success with SANUKEHL Serra in patients with restless legs syndrome, multiple sclerosis or polyneuropathy confirms this. A holistic therapy using different SANUM preparations, however, is the prerequisite for the healing process. This includes the restoration of the impaired intestinal flora and the acid-base balance (see below).

Restless Legs Syndrome

Restless Legs Syndrome mostly affects middle-aged women. Among the symptoms are dysaethesia or paraesthesia mostly at rest or at night, affecting both upper and lower legs, as well as the need to move the legs. When occurring idiopathically, a neurologic examination may not show anything or point towards a polyneuropathic affection (Pschyrembel, 1998).

Restless legs syndrome is treated with the following i.m. injection cocktail, administered once or twice a week:

1 ampoule MUCOKEHL +
1 ampoule SANUKEHL Serra +
1 ampoule SANUVIS +
1 ampoule Cimicifuga comp. (Steigerwald), or
1 ampule Lycoaktin for patients with an inclination to hyperthyreosis.

MUCOKEHL is administered in changing potencies, depending on the reactivity. We frequently observe an initial improvement or deterioration within the first two to three days after the injection.

If the dark-field shows a paratuberculous trait, NIGERSAN may be added to the cocktail. The patient's blood must be checked regularly, to initiate possibly necessary excretion procedures, or to vary the injection cocktail.

The following medicaments supplement the SANUM therapy of Restless Legs Syndrome:

1 tablet Magnerot Classic tablets (Wörwag), mornings and nights,
1 dragée Milagamma 100 dragées (Wörwag), 1 – 2 times a day,
SANUVIS drops or tablets.

The medicaments administered allopathically for Restless Legs Syndrome (Levodopa, Carbamazepin, Clonidin, Clonazepam, etc.) very frequently act as therapeutic blocks. These medicaments must be gradually and slowly discontinued to ensure the success of the therapy.

Patients who have not previously undergone allopathic treatment usually require a remarkably smaller number of injections.

Polyneuropathy

An affection of the peripheral nerves may be caused genetically. Polyneuropathies may also be caused by metabolic disturbances (diabetes mellitus, uraemia), malabsorption

(celiac disease) or endocrine disorders (hyperthyreosis, acromegaly), or by infections like borreliosis or leprosy. Poisoning (mercury, lead, thallium), alcohol and medicaments also bring on the disorder. The most frequent type of the disorder is the diabetic and the alcoholic polyneuropathy (Pschyrembel, 1998). A therapy of polyneuropathy with SANUM preparations depends on the respective primary disease. It is therefore mandatory for example with diabetes patients that the blood glucose value is optimally stabilized with insulin injections, oral antidiabetics or an appropriate diet. A thorough excretion therapy to rid the body of the reason for the polyneuropathy is required with toxic strains. The following injection cocktail is administered i. m. once a week as a supplement to the therapy of the respective primary disease:

1 ampoule MUCOKEHL 6X or 5X +
1 ampoule SANUKEHL Serra 7X +
1 ampoule SANUVIS.

Multiple Sclerosis

The cause of this primarily inflammatory disease of the CNS with focalised demyelinization probably is an autoimmune process against myelin sheath antigens. Viral influences may possibly also take part in triggering the development of multiple sclerosis. The disease occurs in increased numbers with women between the ages of 20 and 40 (Pschyrembel, 1998).

The administration of SANUKEHL Serra to MS patients greatly contributes to improve the respective symptoms.

A combination with other SANUM preparations frequently leads to a shortening of the duration of the episodes as well as a partial or complete remission of the symptoms.

This requires a good reactivity of the patient, which means that the organism's ability to regulate must be intact, as well as a strong and stable immune system.

The treatment of multiple sclerosis requires a particularly holistic approach, including the following:

Restoration of the acid-base balance with SANUVIS, CITROKEHL or ALKALA, immune modulation with UTILIN or UTILIN "S", hapten therapy with SANUKEHL Serra, isopathic therapy with NOTAKEHL, QUENTAKEHL, etc., regulation of the symbiosis with FORTAKEHL or ALBICANSAN and PEFRAKEHL for intestinal fungi, excretion therapy.

The respective medicaments are administered according to the dark-field results. Regular examinations of the native blood by dark-field microscopy are mandatory for a successful treatment of multiple sclerosis.

The above-mentioned medicaments can be combined or supplemented as follows:

1 ampoule NOTAKEHL 7X, 6X or 5X +
1 ampoule QUENTAKEHL 6X or 5X or GRIFOKEHL 5X +
1 ampoule Engystol +
1 ampoule SANUKEHL Serra 5X i. m., once a week.

After the 3rd or 4th injection 1 ampoule UTILIN 6X or UTILIN "S" 6X is added, which is injected separately. QUENTAKEHL can be replaced by GRIFOKEHL.

An initial improvement or deterioration within the first couple of days after the injections may occur as in the treatment of restless legs syndrome.

The therapeutic scheme above should – due to possible interaction – not be combined with an interferon therapy. □

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First published in the German language in the SANUM-Post magazine (62/2003)

Masked Nosocomial Infections as Possible Causes of "Feverish" Infections

by Dr. Konrad Werthmann, Austria

There should be no such thing as hospitalism in these modern times, since antibiotics are the *non plus ultra* and are used accordingly. Nevertheless, there are nosocomial infections. These occur especially among immune-suppressed patients and those with chronic ailments. This is not surprising, since, for one thing, the use of antibiotics is rising even for minor ailments and, for another, immune suppression is used more and more against chronic diseases; finally, 2 out of 3 people are lacking an intact number-one defense organ, the *Mucosa enteralis*. The greater the disturbance or defect in the intestinal mucous membrane, the more susceptible the person is to miscellaneous infections, including those of a nosocomial nature.

These hospital infections are often masked by the symptomatology of an initial worsening or a relapse of a chronic ailment. Therefore, in cases of feverish attacks of a chronic disease, one should, in the anamnesis, always look for a possible casualty department or hospital or senior home visit. This of course also applies for similar disease courses in otherwise healthy persons.

The bacterium *Serratia marcescens* or B. *prodigiosum* is a gram-negative germ belonging to the enterobacteria. This group exhibits high resistance to conventional antibiotics and disinfectants, and reproduces best at room temperature. *Serratia marcescens* is an opportunistic germ, evoking infections in "reduced" patients. It is primarily found in senior homes and hospitals. Repeatedly, it happens that people who are susceptible to infections, and who are in a recovery phase after a feverish infection with antibiotic "protection", get yet another infection. They usually have a high fever (>102° F) for longer than 48 hours. The otherwise usual fever attacks normalize after two days at the most. Recently, we have learned to recognize a *Serratia marcescens* infection by long-lasting diarrhea. At any rate, the anamnesis usually turns up a hospital or senior home visit preceding the outbreak of the disease. For many patients, a family member has brought the germ home. For some patients, such a visit lies up to a week in the past. Two case histories are presented here to illustrate these points.

1. Mr. P.W., 45, bookkeeper, suffered from chronic, partially obstructive bronchitis and ever-recurring right-side sinusitis. The colds were already an everyday matter for him, so that he did not think of himself as particularly sick. A week before his consultation, he visited an aunt in the hospital ward of a senior home. Three days later, he had body temperatures of up to 104° F for three days, which slowly swung down to 102.2° F. Since he could not remember any other possible infection source besides his visit to his aunt, a sip of SANUKEHL Serra 5X was prescribed.

As further therapy, Mr. P. received the following over a two-week period: NOTAKEHL 5X, 2 tablets twice daily; MAPURIT *(DL-α-tocopheryl-acetate, magnesium oxide)*, 1 capsule twice daily; REBAS 4X *(Peyer's Patches extract)* 1 capsule twice daily; SANUKEHL Serra 6X *(Serratia marcescens)*, 10 drops twice daily.

The patient also had to maintain a strict Werthmann diet, with no dairy or egg products. After only two days, his body temperature normalized, and after four days, he was able to do some office work at home.

2. Mrs. I.R., 36, housewife, had suffered for years from rheumatic pains in her shoulders, but without any significant hindrance to her housekeeping activities. Every four months, she would come in for a consultation to have her symptoms cured with a neuraltherapeutic injection of NOTAKEHL 5X into her tonsils. About a week after one of the neuraltherapeutic injections, she got a sudden fever above 102° F for a few days, accompanied by nausea and slightly diarrheic stool with gas formation. At first, a toxin export or initial worsening after the tonsil injection was suspected, but the lack of tonsil or joint involvement didn't fit the symptomatology. Finally, a new exploration of the anamnesis turned up a visit to a relative in the hospital a week before the fever broke out. Here, too, a sip of SANUKEHL Serra

5X was administered intramuscularly, followed by a prescription for the remedy in 6X drop form.

The therapy consisted of:

Diet with no dairy or egg products (Werthmann) RELIVORA Complex *(Drosera, Echinacea angustifolia, Juglans)* drops, 20 drops twice daily; SANUKEHL Serra 6X drops, 10 drops twice daily; MAPURIT, 1 capsule twice daily.

This combination was taken for two weeks. After that, body temperature went back to normal, appetite returned and the crippling fatigue went away. The dairy/egg-free diet (Werthmann) had to be kept up for 4 more weeks.

The homeopathic therapeutic agent SANUKEHL Serra is free of side effects both in sip form (5X) and as drops (6X). Since the chronically ill – but also those suffering from these infections – are low in antibodies, one should always combine with MAPURIT (Vitamin E/Magnesium). With this combination of medications, and a low-antigen diet, one can usually come quickly to grips with nosocomial infections. It seems to be important to restore the intestinal milieu and the patient's former powers of resistance.

One can get an idea of the broad scope of SANUKEHL Serra from the list of naturopathically documented applications. For those of his geriatric patients who regularly find themselves in casualty departments or hospitals, the author has been prescribing this medication as a preventive measure. These older patients are advised to rub 5 drops into the skin (or take internally) twice daily, starting 2-3 days before the consultation. It is too soon yet to say anything definite about this, however.

Documented Applications by Naturopathic Research

Malignomas
All immunosuppressed persons
After chemotherapy and radiation therapy
Diabetes mellitus
Tuberculosis
Burns
Infection-susceptible persons
Intestinal patients with constipation/ diarrhea
Colitis sufferers

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First published in the German language in the "Wir" magazine (2/1998)

Statistical Evaluation of an Application Study with Sanukehl Trich 6X Drops

by Dr. Reiner Heidl

1. Introduction

A total number of 116 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1993 and April 2000 in an application study with the preparation SANUKEHL Trich 6X drops. The homeopathic test preparation, SANUKEHL Trich, consists exclusively of Trichophyton verrucosum e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients who had at least received one dosage of the medicament were included in the study.

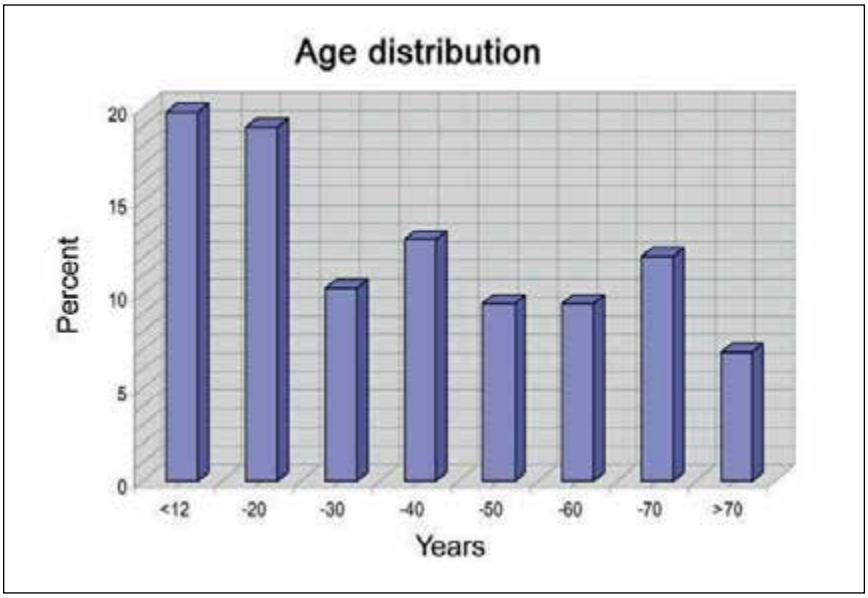
2. Participating patients

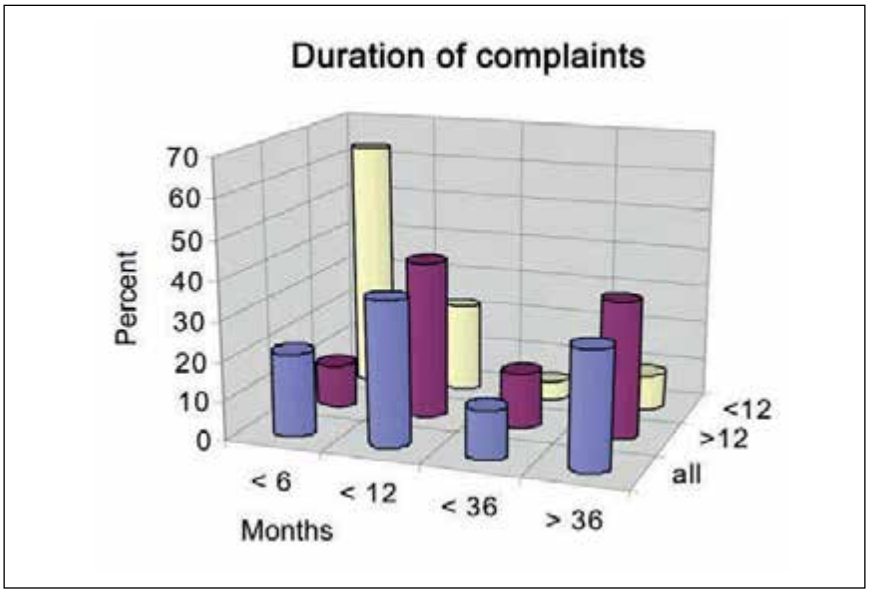
116 patients participated in the study, which comprised of 53 males (46.5%) and 61 females (53.5%). No age was given for two patients. The age of the patients varied between 2 and 91 years, with an average age of 35.6 and a standard deviation of 23.5 years. The two largest patient groups were those under 12 years (19.8%) and between 13 and 20 years (19.0%). Almost the same number of patients was in the groups between 21 and 30 (10.3%), between 31 and 40 (12.9%) and 61 and 70 (12.1%). The same number of patients was in the groups between 41 and 50 as well as between 51 and 60 (9.5%). 6.9% of the patients were over 70 years. Regarding age structure, the males between the age of 35.6 ± 23.7 were of the same age as the females with 35.6 ± 23.4 years.

Height varied between 101 and 191 cm with an average height of 157.7 ± 19.5 cm and weight was between 15 and 95 kg with an average weight of 60.8 ± 18.1 kg.

2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Trich 6X, according to Isopathy, is mainly used with fungal diseases. In the children's group under 12 years the indication tinea corporis was predominant and in the adults' groups additionally foot and nail mycoses as well as intestinal mycosis in some cases only. A diagnosis was made before the start and at the end of the therapy and accompanying therapies were to be documented in the evaluation form.





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	21.1	63.6	10.9
< 12	36.8	22.7	40.2
< 36	12.3	4.5	14.1
> 36	29.8	9.1	34.8

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol how long they had suffered the disease or complaints. Time frames were given of less than six months, up to one year, up to three years and more than three years. With regard to the total population, there were no significant differences between the groups although the group with complaints between one and three years (12.3%) was only half as large as the other groups. Instead of that, the group with complaints between six and 12 months was relatively larger. Comparing the children (patients under 12 years) with the adults, significant differences could be stated. 63.6% of the patients under 12 years suffered for less than six months, in the adult's group this was only the case in 10.9% of the patients, whereas in the adults group 34.8% of the patients suffered for more than 36 months.

All 116 patients included in the study were treated with SANUKEHL Trich 6X drops for the first time.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

According to the nature of an application study, the physicians were not given a preset time limit for the final patient assessment. The final examinations were conducted after a period of 8 to 768 days, with an average of 146.9 ± 170.9 days.

Amongst the children (< 12 years) the therapy lasted on average 215.2 ± 159.2 days and was approximately 70% longer compared with the medium therapy duration of the adult group with 129.9 ± 169.4 days. The differentiated evaluation within specific therapy periods allows for a clearer picture. It reveals that amongst the children (< 12 years) the therapy duration of more than 150 days was clearly in the foreground (56.5% of all patients). Amongst the adults, the largest group was the one with a therapy duration between 25 and 50 days (41.1%) and the second largest was the one with more than 150 therapy days (24.4%).

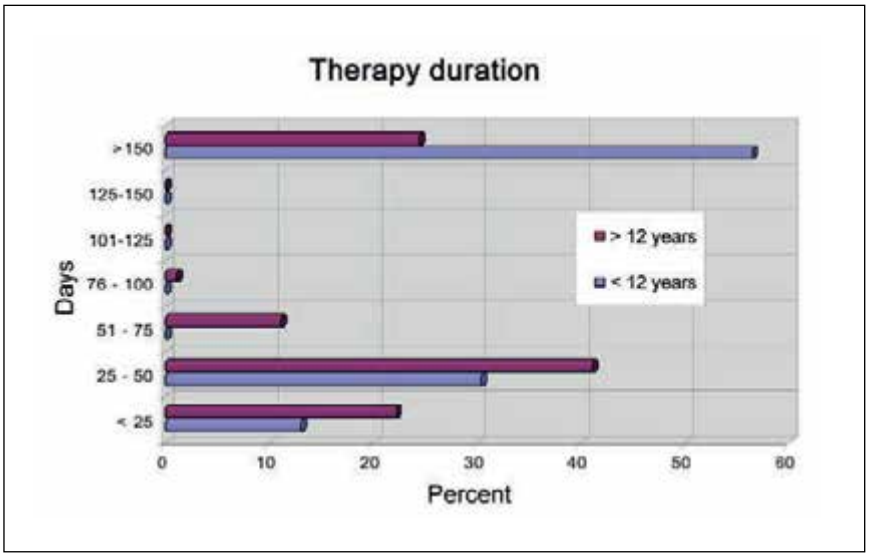
3.2 Dosage

The dosage was set as follows, according to the patient information leaflet:

Oral application: for acute conditions: 5 - 10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day.

External application: Every 1 - 2 days, 5 - 10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

78 patients took the drops orally and 68 patients were treated externally. Multiple counts were necessary, as 29 patients were treated orally and in addition externally. The following table shows the medium dosage of the application forms. The drops are related to the daily oral intake or external application respectively.



The recommended dosage was exceeded by up to the double. The oral as well as the external application was not significantly different between the children and the adult group. The medium dose in monotherapy and combination therapy was the same. The dosage of the external application in the combination therapy was 50% higher than in monotherapy.

4. Efficacy and Tolerance

4.1 Evaluation of Efficacy by Doctor and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 36.2% of the patients assessed efficacy with "very good", 48.3% with "good", whilst 15.5% assessed the efficacy with "moderate". The results of the physicians' evaluation for efficacy were similarly positive as that of the patients. In 44.0% of the cases physicians assessed efficacy with "very good", 38.8% with "good" and 17.2% with "moderate". Neither patient nor physician assessed "no effect". The evaluation by physicians and patients alike was, according to tendency, better in the children's group under 12 years than in the adult's group, as there was a shift-

Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	17.6 ± 6.0	5	40
Drops (topical)	7.9 ± 4.8	4	20

All Patients under 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	15.3 ± 5.4	5	20
Drops (topical)	6.0 ± 0	6	6

All Patients over 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	18.6 ± 6.0	5	40
Drops (topical)	7.9 ± 4.8	4	20

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	17.8 ± 6.6	8	40	Mono
Drops (oral)	17.2 ± 5.0	5	20	Combi
Drops (topical)	6.2 ± 2.6	4	15	Mono
Drops (topical)	9.9 ± 5.9	5	20	Combi

ing from “good“ to “very good“ in comparison with the adult group.

Compliance (N = 112) was assessed by the physicians to be “very good” for 52 patients, “good” for 53 patients and “moderate“ for 7 patients. No patient was assessed with “non-compliant“. Hence 90.5% of all patients participating in the study were given a “good“ or “very good“ compliance rating.

4.2 Evaluation of Tolerance by Doctor and Patient

At the conclusion of the study, an evaluation of tolerance was submitted by the physicians and patients, whereby an assessment of “very good“, “good“, “moderate“ and “poor“ could be chosen. 58.6% of patients and 62.9% of physicians rated tolerance to be “very good”, whilst 39.7% of patients and 37.1% of physicians gave SANUKEHL Trich a “good” tolerance rating. Only 1.7% of patients rated with “moderate”. Neither patient nor physician rated with “poor“.

In the children group under 12 years, patients and physicians rated tolerance with “very good” and “good“ which was clearly better than in the adult group. In the younger group no case was rated with “moderate“ or “poor“ by patients or physicians.

4.3 Side Effects and Discontinuation of the Therapy

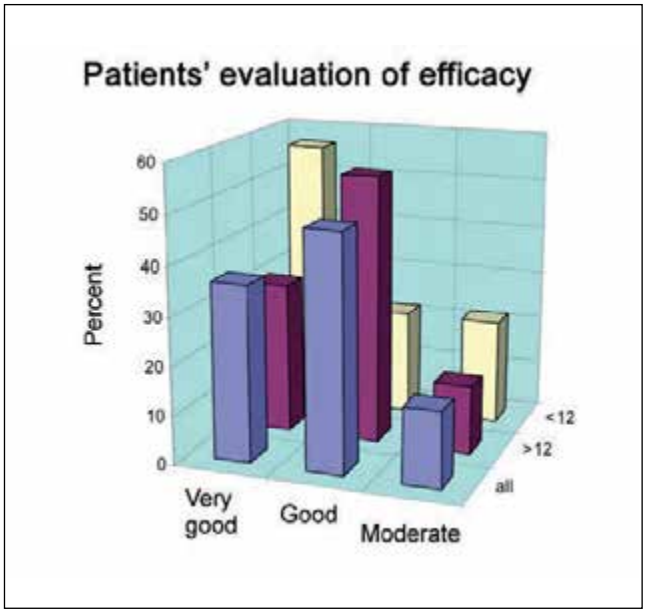
No therapy with SANUKEHL Trich 6X was discontinued and no side effects were reported.

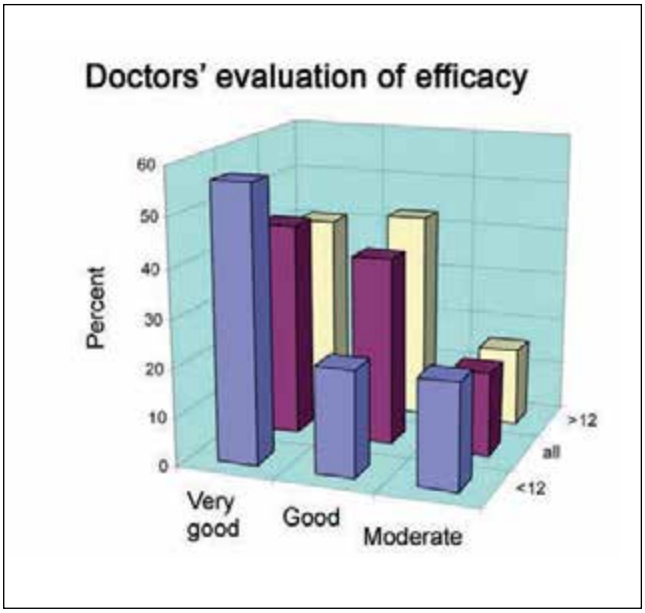
5. Summary

A total number of 116 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between January 1993 and April 2000 in an application study with the preparation SANUKEHL Trich 6X drops. The homeopathic test preparation, SANUKEHL Trich, consists exclusively of Trichophyton verrucosum e volumine cellulae in the 6th decimal potency.

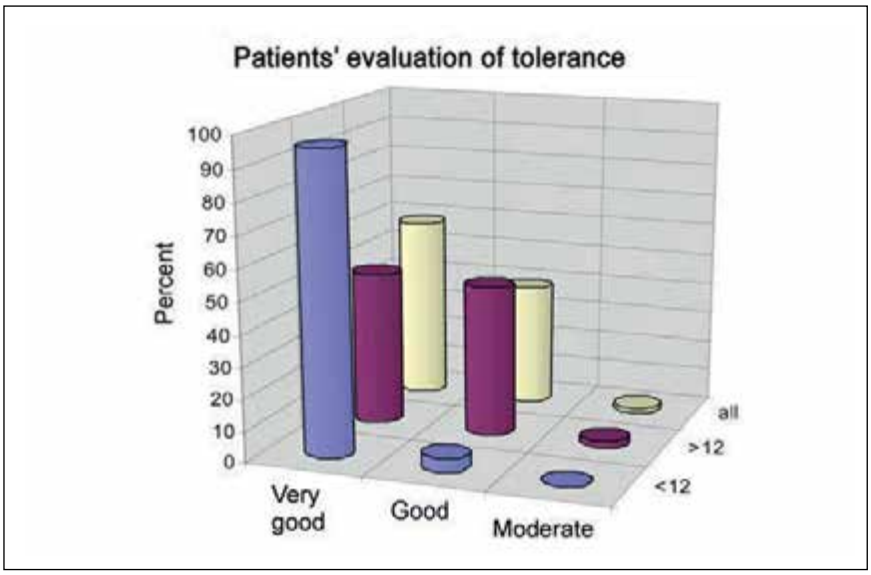
SANUKEHL Trich 6X, according to Isopathy, was mainly used with fungal diseases, independent from the patients’ age. In the children’s group under 12 years the indication tinea corporis was predominant and in the adults’ groups additionally foot and nail mycoses as well as intes-

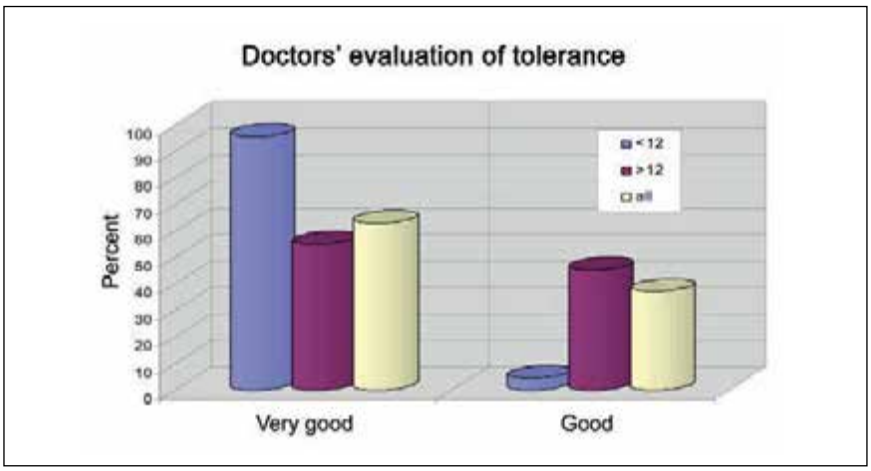
Evaluation of Efficacy								
Patient group	**Patients’ opinion [%]**				**Doctors’ opinion [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	36.2	48.3	15.5	0	44.0	38.8	17.2	0
< 12 years	56.5	21.75	21.75	0	56.5	21.75	21.75	0
> 12 years	31.2	54.8	14.0	0	40.9	43.0	16.1	0





Evaluation of Tolerance								
Patient group	**Patients' opinion [%]**				**Doctors' opinion [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	58.6	39.7	1.7	0	62.9	37.1	0	0
< 12 years	95.7	4.3	0	0	95.7	4.3	0	0
> 12 years	49.5	48.4	2.2	0	54.8	45.2	0	0





tinal mycosis in some cases only. Accompanying therapies were to be documented in the evaluation form.

Amongst the children (< 12 years) the therapy lasted on average 215.2 ± 159.2 days and was approximately 70% longer compared with the medium therapy duration of the adult group with 129.9 ± 169.4 days. The differentiated evaluation within specific therapy periods allows for a clearer picture. It reveals that amongst the children (< 12 years) the therapy duration of more than 150 days was clearly in the foreground (56.5% of all patients). Amongst the adults, the largest group was the one with a therapy duration between 25 and 50 days (41.1%) and the second largest was the one with more than 150 therapy days (24.4%).

78 patients took the drops orally and 68 patients were treated externally. Multiple counts were necessary, as 29 patients were treated orally and in addition externally.

The therapeutic progress was determined by evaluations conducted at the beginning and the end of the therapy. The evaluation of efficacy showed that 84.5% of the patients and 82.8% of the physicians assessed efficacy with "very good" and "good". The evaluation by physicians and patients alike was, according to tendency, better in the children's group, as here was a shifting from "good" to "very good" in comparison with the adult group.

For 90.5% of all patients participating in the study, compliance was certified to be "good" or "very good".

58.6% of patients and 62.9% of physicians rated tolerance to be "very good", whilst 39.7% of patients and 37.1% of physicians gave SANUKEHL Trich 6X drops a "good" tolerance rating. Only 1.7% of the patients rated with "moderate". Neither patient nor physician rated with "poor".

No therapy with SANUKEHL Trich 6X was discontinued and no side effects were reported. □

First published in the German language in the SANUM-Post magazine (87/2009)

The Hapten Remedy SANUKEHL Trich: its Origins and Therapeutical Application

by Joachim Hartmann (Ph. D., Biology)

SANUKEHL Trich is a hapten prepared from the dermatophyte *Trichophyton verrucosum*. This is a cutaneous fungus predominantly occurring in the hide of cattle and other ruminants in the region of the head where it causes so-called "cattle trichophytia". Infection in humans is almost always caused by contact with infected animals and occurs predominantly in agricultural areas. Stalls and objects contaminated with hair and skin cells infected with the fungus act as a reservoir for the mycete, as the pathogens remain infectious for many years. Where conditions in the stalls are poor, intensive animal husbandry facilitates the rapid spread of pathogens in a herd, particularly among young cattle.

Macroscopic manifestations in humans are marked by an acute episode of severe inflammation. Early symptoms may include circular erythematous foci with increasing scaling, infiltration, the formation of pustules, exudation and scab formation. Advanced cases show exceedingly inflamed, considerably painful, nodal cutaneous and/or subcutaneous infiltrates with the formation of abscesses and regional lymphadenitis. Other general symptoms such as fever and lassitude may also be present. As well as the *stratum corneum*, the hair too is affected. The infection becomes even more severe particularly where the hair is thick (e.g. the beard). Localised therapy alone is not sufficient as it generally fails to reach the pathogens in the hair shafts. Doctors trained in traditional medicine prescribe strong antimyotics such as Griseofulvin. A severe inflammatory infection caused by cattle trichophytia is normally followed by a build-up of resistance in the infected person.

A so-called "dermatophytid" – a lesion in which no pathogens are found, far removed from the focus of the infection – may occur as an allergic skin reaction to the presence of the dermatophyte. The clinical symptoms are lichenoid or papulovesicular rashes which can also occur in the form of an *Erythema nodosum*. This skin condition was named *lichen trichophyticus* by Jadassohn who discovered it in 1918. Today it is counted among the "id" reactions, being regarded as the result of the reaction between circulating antigens of the pathogen with skin-sensitising antibodies, and it can, for example, be activated by X-rays, local irritation or repeated massive contact with the antigens. The trichophytids can still occur subcutaneously or on mucous membranes; they appear symmetrically distributed over the body; are sometimes accompanied by fever, leucocytosis and joint lesions; and occur in episodes. Successful treatment of the primary focus causes the "id" reaction to disappear.

The occurrence of autoimmune reactions following dermatophytosis has also been described. Here a reaction was seen between the antibody directed against the fungus and the epithelial tissue. It was possible to hold these antibodies back from reacting with the body's own tissues by binding them with fungal extracts.

In veterinary medicine, extracts from destroyed mycelia of *Trichophyton verrucosum*, administered subcutaneously, have been used successfully to prevent infection in calves. Despite close contact with infected animals, 88% of the vaccinated animals did not develop cattle trichophytia. Immunity for over 3 and anything up to 5 years was achieved in this way.

In humans, a major study of 680 patients with severe trichophytia showed that repeated subcutaneous doses of a special fungal extract – in this case from *Trichophyton mentagrophytes* – could cure 78% of patients without requiring further treatment. Topical application for the prophylaxis of pedal mycosis (athlete's foot) was also successful.

It is interesting that a dimorphism phenomenon like that of *Candida albicans* or *Mucor racemosus* has been described in species of *Trichophyton*. Here the primary infection occurs as a result of fungal hyphae entering the smallest of skin lesions. Under the influence of the host's tissue factors, a morpholo-

gical changeover from the fungal phase to the yeast phase takes place; this is now better adapted to the conditions for growth within the host and has a greater ability to infiltrate the deep tissues – i.e. a greater pathogenicity.

Because of the active principle of the haptens contained in the product SANUKEHL Trich, by using this remedy it should be possible to bond the antigens which are still circulating during or following a dermatophyte infection and to remove these through the immune system. This treatment concept would eliminate the pathogenic factors of the trichophytids. The potential autoimmune reactions ought also to be stopped by binding the excess antibodies with the fungal haptens, thus preventing them from reacting with the body's own structures in a destructive way.

Using chemical analyses, it has been demonstrated that the serologically active polysaccharides in the composition of antigens by *Trichophyton verrucosum* and the strongly anthropophil pathogens *Trichophyton rubrum* and *T. mentagrophytes* are very similar. Therefore, one can expect that SANUKEHL Trich will be effective in diseases in the various forms of tinea, favus and kerion which are caused by other species of trichophyton as well as in cattle trichophytia.

SANUKEHL Trich is registered in Germany for internal and external application in the form of 6X drops. The 5X injection form is available in Holland for intramuscular and subcutaneous administration. □

First published in the German language in the SANUM-Post magazine (37/1996)

Statistical Evaluation of an Application Study with SANUKEHL Strep D6 (6X) Drops

by Dr. Reiner Heidl, Germany

1. Introduction

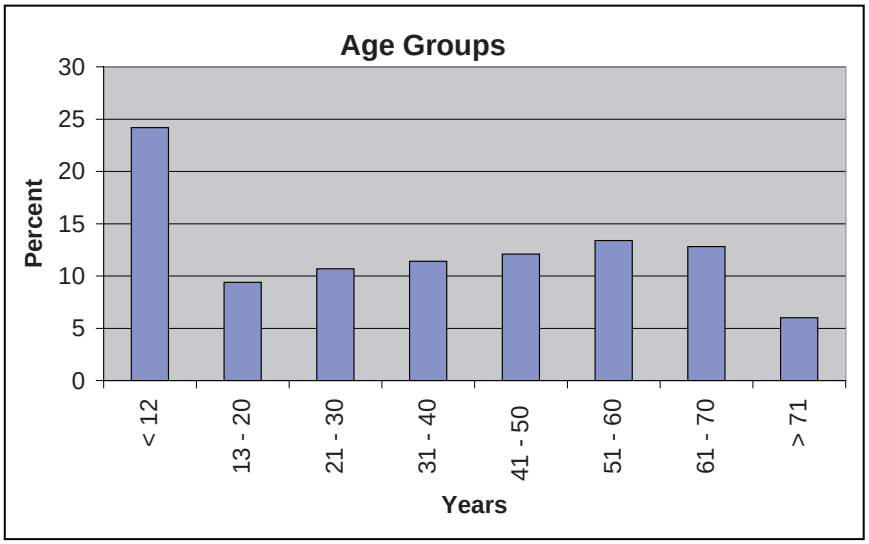
A total number of 150 patients in three medical practices, two specialising in general medicine and one in internal medicine, participated between June 1992 and May 2001 in an application study with the preparation SANUKEHL Strep D6 drops. The homeopathic test preparation, SANUKEHL Strep, consists exclusively of Streptococcus pyogenes e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients were included in the study who had at least received one dosage of the medicament.

2. Participating Patients

150 patients participated in the study, comprising of 50 men (33.3%) and 100 women (66.6%). The age of the patients varied between 4 and 82 years, with an average age of 36.5 and a standard deviation of 22.2. The largest group comprised



of patients under 12 years (24.2%), all other groups between 13 and 20 (9.4%), between 21 and 30 (10.7%), between 31 and 40 (11.4%), between 41 and 50 (12.1%), between 51 and 60 (13.4%) and between 61 and 70 (12.8%) were almost of the same size. 6.0% of the patients were aged over 70. In the age structure, the men with an average age of 42.2 ± 21.4 were on average 9 years older than the women with 33.6 ± 22.0 years.

Height varied between 102 cm and 197 cm, with an average of 162.2 cm ± 16.7 cm. Weight varied between 15 kg and 115 kg with an average of 63.8 kg ± 19.8 kg.

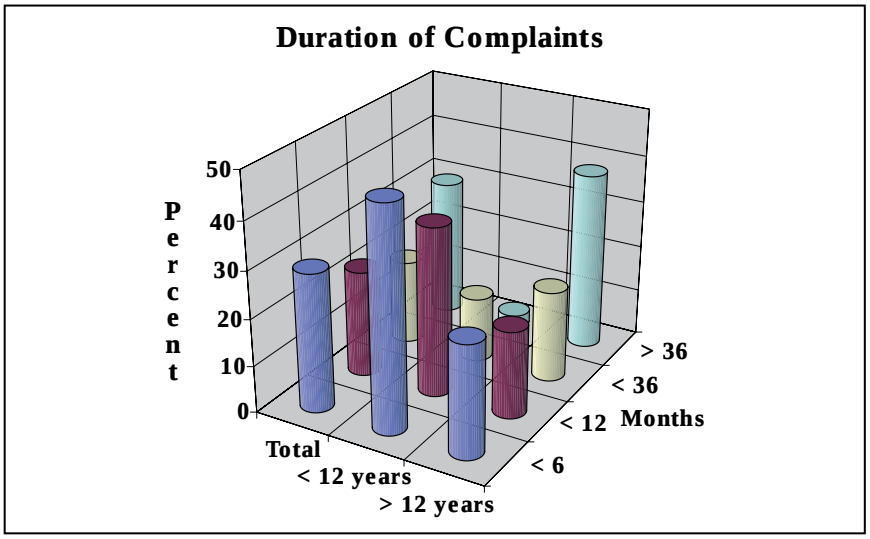
2.1 Diagnoses and Secondary Diseases

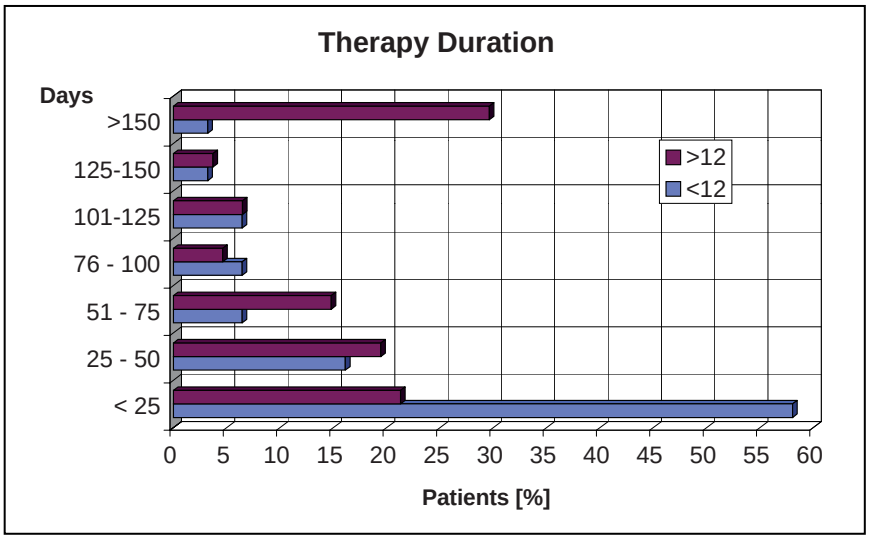
The diagnoses leading to the prescription had to be entered in the study protocol. It showed that SANUKEHL Strep, according to Isopathy, is used in a very wide applicational range. The preferred application was independent of the patient's age. The main indications were tonsillitis, otitis media and sinubronchitis as well as in addition arthritis and functional heart complaints in the adult groups. A thorough diagnosis was made before the start and end of the therapy and accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure for chronic diseases, the patients were asked in the study protocol how long they had endured the disease or complaints. Time-frames were given of less than six months, up to one year, up to three years and more than three years.

The application with acute indications was also reflected in the duration of complaints. The under 12 patients had suffered complaints for

Duration of Complaints (Months)	Patient < 12 years (%)	Patients > 12 Years (%)	Total Patient Population (%)
< 6	47,2	23,9	29,5
< 12	36,1	18,6	22,8
< 36	13,9	19,5	18,1
> 36	2,8	38,1	29,5





less than six months and represent the main part with 47.2%, followed by 36.1% of the patients who had suffered complaints between six and 12 months and 2.8% for more than 36 months. In the adult group of patients chronic complaints were in the foreground with 38.1%. 23.9% had suffered for less than 6 months, 18.6% between 6 and 12 months and 19.5% between one and three years. 5 of the 150 patients included in the study had been treated before with SANUKEHL Strep D6 drops.

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

According to the nature of an application study, the physician was not given a preset time-limit for the final patient assessment. This final examination was conducted after a period of 7 to 1133 days, with an average value of 115.6 days ± 147.8 days.

Amongst the children (< 12 years) the therapy lasted with 50.7 days ± 90.6 days approx. one half shorter than in the adult group with 134.1 days ±155.5 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that among the age group of the children under 12 years, the therapy duration of up to 25 days stood clearly in the foreground (58.1% of all patients). Amongst the adults, the largest groups were the one with more than 150 therapy days (29.6%) and 21.3% with a therapy duration of up to 25 days.

3.2 Dosage

The dosage was set as follows, according to the patient package insert:

Oral application: for acute conditions: 5 - 10 drops (every 12 to 24 hours); for chronic conditions: 10 drops every second day.

External application: Every 1 – 2 days, 5 – 10 drops on the affected area or in the cubital fossa. After eight weeks, the therapy should be discontinued for several months.

109 patients took the drops orally and 80 externally. Multiple counts were necessary as 39 patients took the drops orally as well as externally. The medium dosage based on the form of application is shown in the following table. The drops are based on the daily oral and external application.

The recommended dosages were taken. In the children's as well as in

Total Population			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	13.6 ± 5.9	4	30
Drops for extemal application	8.0 ± 2.9	2	15

All Patients under 12 Years			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	12.9 ± 5.9	4	30
Drops for extemal application	6.3 ± 2.5	3	10

All Patients over 12 Years			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	13.9 ± 5.9	5	24
Drops for extemal application	8.6 ± 2.7	2	15

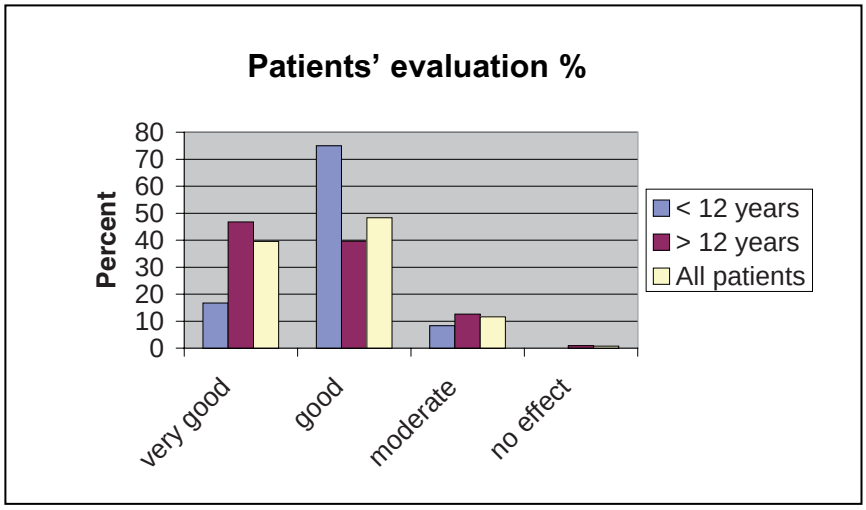
Monotherapy / Combination Therapy (Total Population)			
	Average dose	Minimum dose	Maximum dose
Drops for oral intake	13.8 ± 6.4	4	30 monotherapy
Drops for oral intake	13.3 ± 4.9	5	20 comb.therapy
Drops for external application	10.0 ± 0.4	8	12 monotherapy
Drops for external application	5.9 ± 2.8	2	15 comb.therapy

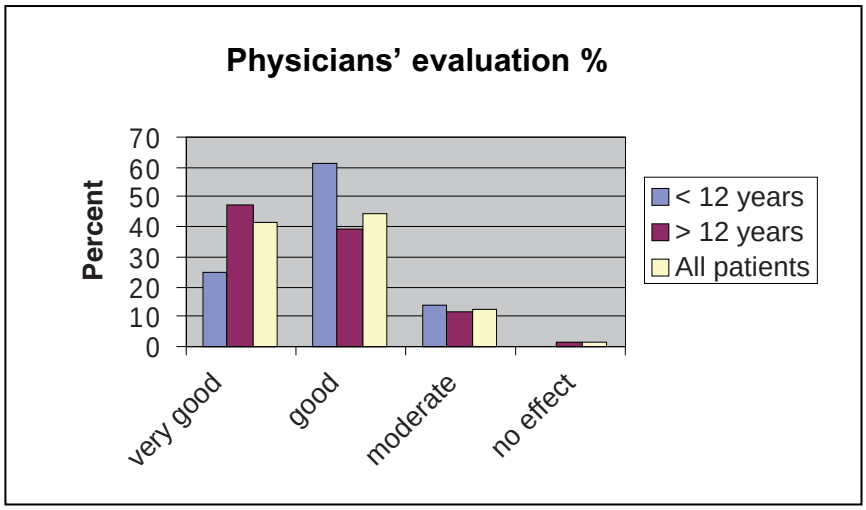
the adult group, the dosage was almost the same. The medium dosage was the same in monotherapy and in the combination therapy. The dosage of external application in the combination therapy was nearly one half lower than that used in monotherapy.

4. Comparison to Previous Therapy

5 adults were treated with SANUKEHL Strep D6 drops during the last five years. This group is too small to make a comparison between first and repeated application. By a comparison of efficacy and tolerance in both patient groups of first-time application users and repeated application users, it would have been possible to evaluate a possible sensitisation towards the active ingredient. However, it is remarkable that patients as well as physicians evaluated tole-

Evaluation of Efficacy								
Patient Group	Patients' evaluation %				Physicians' evaluation %			
	Very good (%)	Good (%)	Moderate (%)	No effect (%)	Very good (%)	Good (%)	Moderate (%)	No effect (%)
All Patients	39.5	48.3	11.6	0.7	41.9	44.6	12.2	1.4
< 12 Years	16.7	75.0	8.3	0	25.0	61.1	13.9	0
> 12 Years	46.8	39.6	12.6	09	47.3	39.3	11.6	1.8





rance with repeated application users to be "very good" and "good".

5. Evaluation of Efficacy

5.1 Evaluation of Efficacy by Physician and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". Additionally the physicians were requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 39.5% of the patients thought efficacy to be "very good" and 48.3% "good", whilst only 11.6% assessed the evaluation with "moderate" and 0.7% stated "no effect".

The results of the physicians' evaluation for efficacy were similarly positive as those of the patients. The physicians evaluated efficacy in 41.9% of the cases as "very good", 44.6% as "good", 12.2% as moderate and 1.4% as "no effect".

The evaluation by physicians and patients alike was according to tendency better in the adult's group, as here the assessment shifted from "good" to very good" compared with the children's group.

Compliance (N = 145) was assessed by the physicians to be "very good" for 91 patients, "good" for 41 patients and 13 patients with moderate, hence 88% of all patients participating in the study were given a "good" or "very good" compliance rating. No patient was given a "non-compliant" rating.

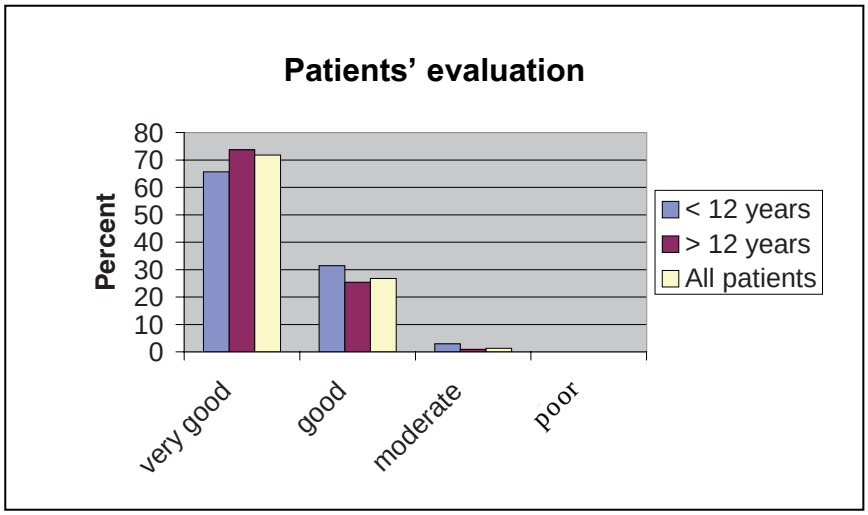
5.2 Evaluation of Tolerance by Physician and Patient

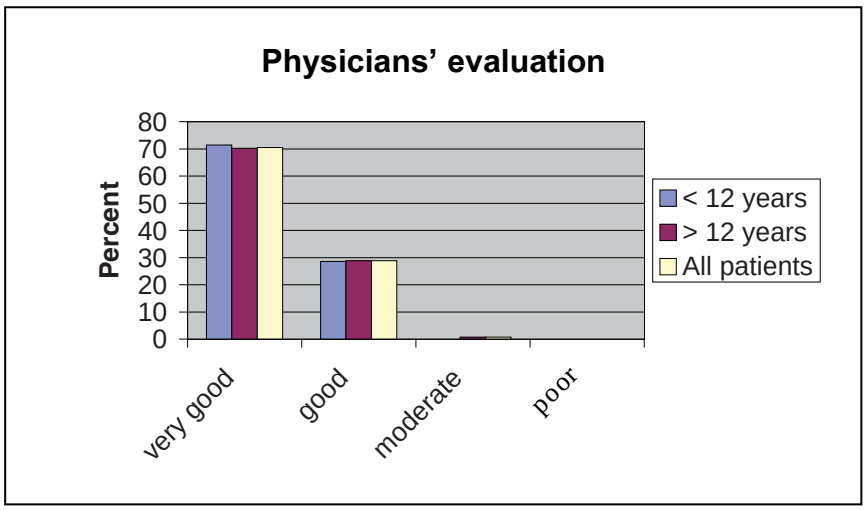
An evaluation of tolerance was submitted by the physicians and patients at the conclusion of the study, whereby an assessment of "very good", "good", "moderate" and "poor" could be chosen. 71.8% of patients and 70.5% of physicians rated the tolerance to be "very good", whilst 26.8% of patients and 28.9% of physicians gave

Evaluation of Tolerance								
Patient Group	Patients' evaluation %				Physicians' evaluation %			
	Very good (%)	Good (%)	Moderate (%)	Poor (%)	Very good (%)	Good (%)	Moderate (%)	Poor (%)
All Patients	71.8	26.8	1.3	0	70.5	28.9	0.7	0
< 12 Years	65.7	31.4	2.9	0	71.4	28.6	0	0
> 12 Years	73.7	25.4	0.9	0	70.2	28.9	0.7	0

SANUKEHL Staph a "good" tolerance rating. 1.3% of the patients and 0.7% of the physicians rated it "moderate". No case was assessed as "poor".

In the children's group over 12 years, the patients rated the tolerance with "very good" and "good", a little better than that of the age group under 12 years. In the younger age group, the assessment shifted from "very good" to "good". The physicians' rating was the same in both age groups.





5.3 Side Effects and Termination of Therapy

No patient discontinued the therapy with SANUKEHL Strep and no side effects were reported.

6. Summary

A total number of 150 patients in three medical practices, one specialising in internal medicine and two in general medicine, participated between June 1992 and May 2001 in an application study with the preparation SANUKEHL Strep D6 drops.

The homeopathic test preparation, SANUKEHL Strep, consists exclusively of Streptococcus pyogenes e volumine cellulae in the 6th decimal potency. SANUKEHL Strep was used in a very broad application range in accordance with Isopathy, whereby the preferred application was independent of the patient's age. The main indications were tonsillitis, otitis media and sinubronchitis as well as in addition arthritis and functional heart complaints in the adult groups. Accompanying therapies were to be documented in the evaluation form.

Among children (<12 years) the therapy lasted with 50.7 days ± 90.6 days approx. one half shorter than in the adult group with 134.1 days ±155.5 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It

reveals that among the age group of the children under 12 years, the therapy duration of up to 25 days stood clearly in the foreground (58.1% of all patients). Among the adults, the largest groups were the one with more than 150 therapy days (29.6%) and 21.3% with a therapy duration of up to 25 days.

109 patients took the drops orally and 80 patients took them externally. Multiple counts were necessary as 39 patients took the drops orally as well as externally. 5 adults were treated with SANUKEHL Strep D6 drops during the last five years. This group is too small to make a comparison between first and repeated application.

The therapeutic progress was determined by evaluations conducted respectively at the beginning and the end of the therapy. 87.8% of the patients and 86.5% of the physicians rated the efficacy of the therapy as “very good“ and “good“. The evaluation by physicians and patients alike was according to tendency better in the adult’s group, as here the assessment shifted from “good“ to very good“ compared with the children’s group. For 88% of all patients participating in the study, compliance was certified to be “good“ or “very good“.

71.8% of patients and 70.5% of physicians rated the tolerance to be “very good“, whilst 26.8% of patients and 28.9% of physicians gave SANUKEHL Strep D6 a “good“ tolerance rating. 1.3% of the patients and 0.7% of the physicians rated it “moderate“. No case was assessed as “no effect“. No therapy was discontinued and no side effects occurred. □

First published in the German language in the SANUM-Post magazine (75/2006)

Cell Wall Deficient Forms (CWD)

Not only Treatment Blocks, but also the Cause of Chronic Diseases, and Particularly Mitochondriopathies

by Iliane Zenzinger, Naturopath

Introduction

Any functional disorder of the mitochondria, whether hereditary or acquired, is referred to as a mitochondriopathy. Since 80% of modern lifestyle diseases, such as diabetes, MS, Parkinson's, CFS, ALS, cryptopyrroluria, arthritis, colitis syndrome and fibromyalgia, have been recognised as mitochondriopathies, it is important to identify and eliminate their triggers. On account of their presence in cells within the body, often undetected, cell wall deficient pathogens (CWD) provoke the formation of nitrogen monoxide (NO) on an ongoing basis. This is one of the aggressive radicals and triggers nitrosative stress, which ends up by causing massive damage to the mitochondria.

Used judiciously, SANUKEHLS are an effective treatment in combatting CWD, in combination with a reduction of NO, and supplemented with selected substances for repair of the mitochondria.

The Discovery of CWD Forms

Even back in the previous century, more than 100 researchers had discovered microbes in the blood of chronically sick patients, especially those with cancer, (even within erythrocytes) and, in some cases, had been able to trigger tumour formation by over-inoculation of these germs.

Prof. Enderlein summarised these pieces of research, recognised that microbial development is cyclical, was the first to complete the cycle of the "endobiont" in human and animal bodies and, in 1925, published his "Cyclogeny of Bacteria".

Prof. Max Taylor of the University of British Columbia, Vancouver, Canada, coined the concept "Serial Endosymbiosis Theory (SET)". SET maintains that all living creatures (bacteria, plants, animals) have developed as a result of symbiotic fusion (he calls it symbiogenesis).

Nowadays, for us it is an accepted fact that on average about 1,500 former proteobacteria, now known as mitochondria, inhabit the cells of our bodies. These migrated into archæa thousands of millions of years ago. Only a few years ago, orthodox medicine's dogma that blood is sterile collapsed. Prof. Dr. Lida Mattman of the University of Michigan, nominated in 1998 for the Nobel Prize, was the first to publish in detail information regarding intraerythrocytary forms. She called them CWD Forms (cell wall deficient forms), as they do not possess a complete external cell membrane.

Mattmann managed to confirm an observation of Prof. Enderlein's, that these forms are able to revert to the classic bacterial forms, depending on the current state of the milieu. In particular high pH levels in the blood favour the formation of CWD. Mattman also isolated spirochætes from the cerebrospinal fluid of MS patients. In the literature we often find the term CWD replaced by "L-form" or "L-phase of bacteria", or by "spheroplast".

Antibiotics provoke CWD

In 2009 Professor Martin Loessner (ETH Zürich) succeeded in breeding L-forms of Listeria with the aid of antibiotics. These survived for days inside macrophages and were able to reproduce there, although - without a cell wall - they only have a cell membrane. For therapeutic purposes it is of interest to know that CWD cannot be detroyed by antibiotics. On the contrary, their creation is triggered by them (esp. Penicillin, Streptomycin, Tetracycline, Chloramphenicol, Sulphonamide), and thus they contribute to rendering an illness chronic. Such CWDs cannot be detected by the immune system, because the cell wall is missing, and for the immune cells this serves as a recognition marker of the individual germs. It is only because of these cell wall constituents that immunological reactions are possible.

Until British troops arrived on the Faeroe Islands (in 1939) MS was totally unknown there. However, from 1939 to 1959 one islander in every thousand contracted MS. At the time the suspicion was raised that the illness had been "imported", although it was not possible to demonstrate proof of any pathogen. David Wheldon discovered L-forms of chlamydia, calling them "cryptic

forms", and he was able to identify them as the triggers of MS. Finally, in 2001 in Norway, L-forms of borrelia were found in cerebrospinal fluid. As these can survive undetected for months in the body, the researchers now realised why the search for borrelia antibodies had been unsuccessful up to that point.

Prof. Trevor Marshall of Murdoch University, Australia, found combinations of a very wide variety of pathogens (bacteria in L-form, viruses, fungi) in all auto-immune diseases; these microbes provoke a latent inflammation in the body, caused by TH1 cells. He issued an urgent warning against always blaming just one single pathogen. An investigation of healthy sports students showed an astonishing result: 30% of the subjects were "harbouring" CWD in their erythrocytes, most commonly staphylococci and streptococci, as well as E. coli and chlamydia. Nonetheless, they exhibited no clinical symptoms. This is why many therapists fail to recognise how dangerous CWD forms

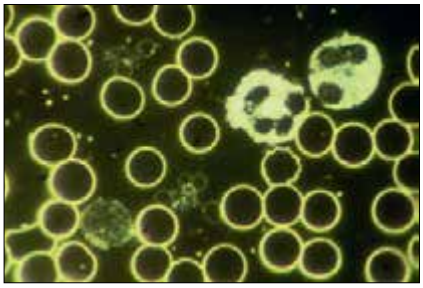


Fig. 1: Normal blood

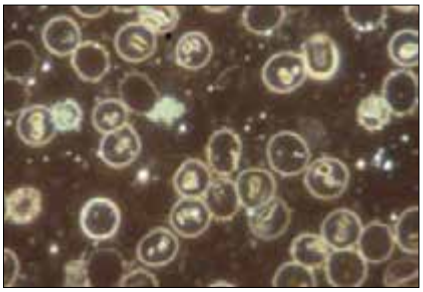


Fig. 2: Erythrocytes with CWD forms.

can be. CWD show up well in dark-field microscopy as a "wafting flickering" in the erythrocytes, or as bacteria (see Fig. 2). Wrongly they are tolerated as "physiological", so long as the patient is not suffering from any complaints.

The Importance of the SANUKEHLS

In order to provide the body with the ability to recognise such CWDs, the immune cells must be presented with parts of the missing cell wall. This is achieved by means of haptenes from the SANUM-Kehlbeck company, available as SANUKEHLS. There are 13 different remedies to match the various CWDs. The allocation to the individual germs may be recognised from the second part of the preparation's name, e.g. SANUKEHL Strep, SANUKEHL Klebs. Thus the choice assumes that there has been a careful casetaking. The SANUKEHLS offer the best possibility of rendering the CWDs detectable by the immune system.

From the foregoing information regarding intracellular colonisation in healthy research subjects, and from Prof. Trevor Marshall's statements, it may be seen that the SANUKEHLS, along with Isopathics, should always be employed in chronic cases, and that we should always bear in mind a combination of various SANUKEHLS, in order to cover a wide spectrum of possible pathogens.

The following list contains the various bacteria and viruses to be thought of in various diseases; (the appropriate SANUKEHLS are already emphasised in the name of the pathogen):

Prostatitis: PSEUdomonas species, Escherichia COLI, KLEBSiellae, Cytomegalovirus

Rheumatoid Arthritis: BRUCELla melitensis, Toxoplasma, Adenoviruses, MYCobacteria, Borrelia, PROTeus mirabilis, Coxsackie viruses

Fibromyalgia: Herpes viruses, Coxsackie viruses, Clostridia, Cytomegalovirus

Glioblastoma/Glioma/Astrocytoma: Herpes

Tumours:

- Mammary carcinoma: SERRAtia marcescens
- Prostate cancer: PSEUdomonas species, SERRAtia marcescens, Escherichia COLI
- Pharyngeal cancer: STAPHylococci
- Cancer of colon/Liver metastases KLEBSiellae, Clostridia
- Pancreatic cancer/Lymphoma PROTeus (50%)
- Lung cancer: MYCobacteria

The following viruses are found in the tumours as mentioned:

- Liver cancer: Hepatitis C viruses (95%)
- Sarcoma: retroviruses
- Cancer of colon: Adenoviruses (40%)
- Lymphoma: EBV (50%)
- Nasopharyngeal cancer: various viruses (100%)
- Cervical cancer: HPV (80%)
- Thyroid cancer: various viruses (20-50%)
- Brain tumour: Herpes simplex/zoster (30-40%)

But What Constitutes the Real Danger of These CWD Forms?

The body attempts to eliminate the intracellular pathogens (CWDs), and to do so it makes use of certain mechanisms which may subsequently give rise to problems.

It is only by means of Nitrogen monoxide (NO) that the body can annihilate all the intracellular bacteria, likewise viruses, fungi and parasites (including cancer cells). Since NO fulfils very many important functions, its action times are of significance. Epithelial NO (eNO), which for instance regulates blood pressure, erection or neurotransmission in the brain, only acts for a few seconds, and is thus unable to cause any damage such as nitrosative stress. Mitochondrial NO (mNO) on the contrary, which the body requires in order to destroy tumour cells (*inter alia* for resolution of apoptosis), acts for days. Induced NO (iNO) to combat pathogens can act for months, thus causing devastating damage to the metabolism. Almost all cells of the immune system are capable of expressing iNO, but macrophages particularly so. iNO is induced primarily via cytokines such as TNF-α, Il-1 and interferon. It is employed to combat pathogens, and serves to deflect viruses, fungi, bacteria and parasites. Sadly the two last-mentioned mutually provoke each other.

Nobel Prize for NO

In 1992 NO was chosen by *Science* as "Molecule of the Year". In 1998 Furchgott, Ignarro and Murad were awarded the Nobel Prize, because these researchers had been able to demonstrate the important function of the NO molecule as a messenger substance, especially in cellular communication.

NO is a Janus-faced molecule. It fulfils a wide variety of important functions in the body; however, if too much of it is produced, it can act destructively. It easily diffuses across all cell membranes. If there is a lack of NO antagonists (such as B12), or defence systems (e.g. red. glutathione), the result is powerful nitrosative stress. Peroxynitrite, an extremely dangerous radical, is formed from NO plus peroxide; it can irreversibly inhibit the mitochondrial respiratory chain, or result in destruction of the mitochondria. In dying, these can themselves become "radical bombs", damaging nearby mitochondria. In this way, whole chain reactions can be set in motion. Prof. Martin Pall (Washington State University, Institute of Molecular Biology) calls this the "NO/ONOO cycle". Quotation: "One example is Nitric oxide, which elevates peroxynitrite, which in turn promotes oxidative stress, which cranks up NF-kappa B, which in turn raises the production of indicatable Nitric oxide synthase (iNOS), which in turn raises the level of Nitric oxide. A real vicious circle."

Mitochondria

On an average, one cell is inhabited by 1,500 mitochondria; these divide every 4-5 days and have a life of c. 10-12 days. Nerve, liver and heart muscle cells may contain up to 10,000 mitochondria. 70% of the heart consists of mitochondria. The total surface of mitochondrial membranes, in which energy is produced with the help of oxygen, amounts to more than 100,000 m^2 (10 hectares). That is 330 times the surface area of the gut which, with 300m^2, is already impressive in size. Mitochondria are responsible not only for the production of ATP, but also for Calcium homeostasis, apoptosis (esp. of cancer cells) and the production of the pre-stage of all steroid hormones.

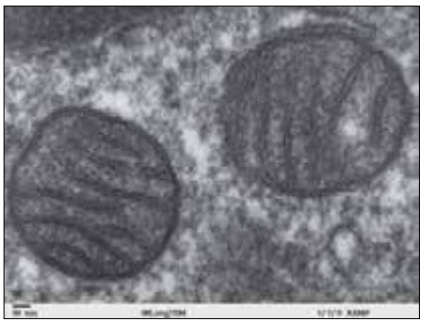


Fig. 3: Mitochondria (Source: Wikipedia)

The mitochondria lie snugly side by side and unprotected in the open cell plasma. (See Fig. 3). Particularly in cartilage, retina or myelin sheath they are susceptible to attack by free radicals (oxidative stress) or NO (nitrosative stress). This is why they have numerous defence systems at their disposal.

The body detoxifies these radicals by means of manganese-containing peroxide dismutase or selenium-containing glutathione peroxidase. Nowadays many people suffer from a deficiency of manganese, selenium, coenzyme Q10 or glutathione, with resultant damage to the mitochondria. For example, an infection that is assumed to be harmless, maybe with CWD following administration of antibiotics, may progress to severe mitochondrial damage because of the constant production of NO. Initially there is a detectable restriction of steroid hormone production, often wrongly interpreted as "menopausal problems" or latent depression.

As the NO level rises, ATP production in the mitochondria drops, and because of this patients feel tired and lacking in energy. Frequently this marks the onset of burn-out syn-

drome. Compelled by inadequate ATP production, the body switches to glycolysis and produces too much lactic acid. Should the mitochondria shut down completely (which Dr. Heinrich Kremer has recognised as a protective shut-down to protect the mitochondria), the cell switches over to “cancer cell mode”.

Two Further Factors may Undesirably Boost NO Production in the Body:

1. Mobile Wireless Radiation

Pulsed microwaves in the gigahertz range, e.g. mobile phones, W-LAN, UMTS, TETRA, etc., cause the creation of NO gas in the cell, and this, because of the increased requirement, results in a shortage of antioxidants, glutathione in particular. The level of malondialdehyde in the blood rises, which can be pinpointed as a marker of oxidative stress. (Source: Pub-med, Med Pr. 2002; 53(4):311-4. Polish. PMID: 12474410)

2. Trauma to the Cervical Spine

Prof. Bodo Kuklinski was the first to recognise the connection between trauma to the cervical spine and mitochondrial damage and the typical mitochondriopathies resulting from it. According to Kuklinski, one of the main causes of nitrosative stress is instability of the cervical spine, as “the most frequent undetected damage in the human being”, caused by trauma to the cervical spine. Whiplash injuries are caused not only by car accidents, but in large numbers by the recent high-risk sports such as inline skating, snowboarding and ski-ing. A so-called unstable “dancing” Dens axis of the cervical spine can stimulate the production of NO for months on end. How does this come about? The joint at the nape of the neck possesses the most proprioreceptors, since it is a kind of sensory organ. It co-ordinates the axis of vision, motor centre and speech centre. A Dens axis that is too mobile irritates the proprioreceptors, whereupon NO gas is released and the mitochondria, especially those of the surrounding tissues are damaged. As a result of this, for example, the oligodendrocytes of the myelin sheath are destroyed. The consequence of this may be MS. Kuklinski noticed the elevated NO gas content in the air exhaled by MS patients and drew the correct conclusion: repair of the mitochondria and treatment of the cervical spine result in clear improvements.

According to Kuklinski, reflux is almost always caused by an excess of NO. The gas causes a chronic extension of the cardiac sphincter muscle (œsophageal sphincter), often with heartburn as a consequence. This can be eliminated by giving a few ampoules of Vitamin B12 SANUM, which immediately bonds with the NO.

Treatment

The milieu is not solely defined by pH level and redox potential. The cell membrane potential is a decisive factor whether CWDs (but also viruses or pathogens with cell membrane intact) are able to penetrate the cell interior. This should reach at least -70mV. Here any treatment makes sense which can raise the membrane potential, e.g. AN-DI Energetic Corrector, as designed by Prof. Rafael Saakian, or movement in the fresh air, which contains many negatively charged ions (forest, seaside or mountains). It is sensible to treat electromagnetic fields with respect, as these can change the voltage conditions of the membrane, thus preventing optimum supply to the cell interior.

UTILIN makes it easier for CWD forms to leave the erythrocytes, thus initiating the process that Enderlein called mochlolysis. (See Figs. 4-6)

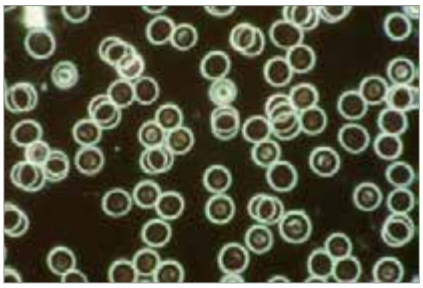


Fig 4: Female patient with severe angina (bacilli in the swab): Erythrocytes polluted with CWDs.

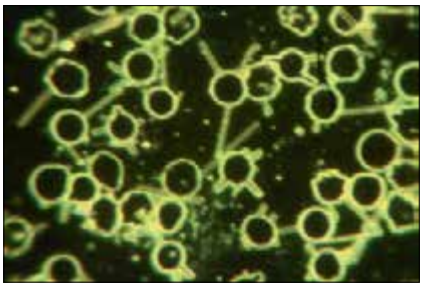


Fig. 5: Forms leaving the erythrocytes following injection of UTILIN 6X.

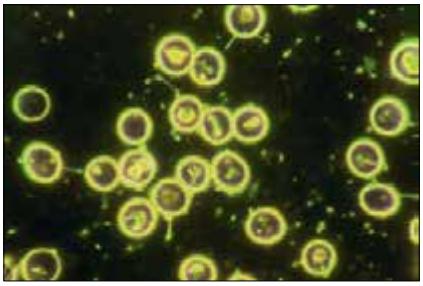


Fig. 6: Female ulcerative colitis patient; blood after three weeks' dosing with UTILIN 6X, with pathogens exiting the cells.

CWDs in Dairy Products

Unless it comes from organic sources, milk should be avoided for the following reasons: over 80% of the cows suffer from chronic mastitis. Following administration of antibiotics they excrete CWD forms of a wide variety of germs for weeks. In 2005 Dr. Hrska found CWD forms of mycobacteria in 49% of samples of infant milk formula. In 2008 in the state of North Rhine-Westphalia, the University of Bonn found chlamydia in over 61% of dairy businesses. These cows also had enormous amounts of Proteus, Coli, staphylococci and streptococci. Since chlamydia cannot produce any ATP of their own, they only reproduce within the cell; because of the missing peptidoglycan layer in the cell membrane, their presence is very hard to demonstrate, and impossible if they are CWD forms.

What was striking among the researchers' observations was, that it was precisely the animals who had tested negative whose milk showed higher microbial counts. All samples from vaginal secretion were first tested for *Chlamydophila* spp. by means of real-time PCR genus-specific (external primers). The milk itself was not examined, because vaginal secretion gives a more reliable proof. In the event of positive proof the PCR product as received serves as a matrix for the second round for investigation, the species-specific PCR (internal primers). The procedure is described in KALTENBOECK et al. (1997). So as to render the amplificates from the species-specific PCRs visible, these were separated off electrophoretically, with a DNA size-marker, in an agarose gel, stained with Ethidium bromide, and evaluated by means of the "Vista Flourlmager Sl". Thus it is almost impossible to drink milk that is free of pathogens, given the large degree of thorough mixing nowadays because of milk collection by the large dairy companies.

Glutathione

In the course of the treatment already mentioned, it frequently happens that concomitant allergies also disappear. The balance of the TH1 and TH2 systems depends on the glutathione level. Assisted by NO, the TH1 system combats all intracellular pathogens, e.g. viruses, CWDs (L-forms of bacteria) of chlamydia, mycoplasma, fungi etc. Since the body avoids inflicting damage on itself, it only produces as much NO as the protection it enjoys from glutathione. If there is a glutathione deficiency, it therefore switches over to the TH2 system (the TH1-TH2 switch). The TH2 system combats the pathogens with antibodies. However, the constant dominance of antibodies favours allergies and auto-immune diseases.

The typical TH1 reaction - with NO - e.g. in viral illnesses, visible in the fever, vasodilation (headache/lethargy) is no longer possible. Indeed, children who have had numerous vaccinations resulting in TH2 dominance, are no longer able to produce a fever. Glutathione is used in the body primarily by environmental toxins (heavy metals, insecticides, many medicines, esp. Paracetamol). We should avoid all medicines that intervene in the mitochondrial metabolism, e.g. statins (they reduce the synthesis of coenzyme Q10), b-blockers or Enalapril.

Repair of the Mitochondria

Thus, in treating the patient, not only must the building blocks of the defence system be built up (glutathione, Q10, carnitine, omega-3-fatty acids, vit. B complex, manganese, molybdenum, chromium, selenium, zinc - Ed.), but substances must also be given which make repair of the mitochondria possible. Here we must bear in mind the polyphenol group (e.g. curcumin, OPC, salvestrol, catechins, quercetin etc.), since a number of these can even improve the transmission of electrons within the respiratory chain.

Curcumin - an extract of turmeric - can function more or less as a substitute for the respiratory enzyme cytochrome C. In addition, curcumin also helps to economise on glutathione by increasing the level of synthesis of reduced glutathione. It can intervene effectively at several points in the vicious circle of NO/ONOO: Curcumin can also detoxify peroxide, thus preventing the formation of dangerous peroxinitrite, even if a large amount of NO is present. It also lowers the level of NF-kappa B and with it the induced production of NO - and this means that the vicious circle is broken.

Meanwhile, at Houston university, Texas, over 400 studies have been carried out on the anti-inflammatory and successful tumour-inhibiting action of curcumin. Depending on the severity of the illness, 120-400 mg curcumin per 15 kg of body weight should be taken, in the form of a concentrated extract, and not as powdered curcumin.

Typical Mitochondriopathies and their Treatment

See Fig. 7.

Fibromyalgia

In dark-field microscopy we often find CWDs, fibrin networks and lumpy erythrocytes, or the so-called "coin-roll shape". As a result of the shortage of ATP a large amount of lævorotatory lactic acid is produced, and this increases the over-acidification of the body. Frequently severe nitrosative and oxidative stress predominates. Laboratory parameters such as homocystein are frequently elevated, likewise LDH, citrullin, malondialdehyde and lipid peroxidation. Selenium, glutathione and vitamin D, on the other hand, are depressed in most cases.

Milieu Regulation

- Correction of pH level: 1 measuring-spoonful ALKALA N powder in the evenings before retiring, dissolved in hot water and sipped
- Intestinal cleansing: FORTAKEHL 5X drops or tablets, depending on testing, or 1 capsule 4X a day; plus 1 capsule SANPROBI daily.

Isopathic Basic Regulation:

- Fibrin reduction: MUCOKEHL 3X 1 suppository daily in the evening, or an injection 1-2 times a week, depending on testing.
- Bacterial infestation: NOTAKEHL
- Viral infestation: QUENTAKEHL

Stimulation of Cell Respiration / Reduction of Pathological Lactic Acid

- CITROKEHL and SANUVIS drops, or a mixed injection, together with MUCOKEHL

Identification of CWDs for the Immune System

- Appropriate SANUKEHLS: 8 drops once a day (4 drops sublingual - 4 drops massaged in)

Immunomodulation:

- Mochlolysis enables CWDs to exit the cells: UTILIN 6X ($^1/_2$ - 1 capsule a week)

Acute NO Reaction / Pain Control

- Binding of NO: Vitamin B12 SANUM (initially at least 1-2 ampoules a week)

Repair of Mitochondria:

- SELENOKEHL, Vitamin B complex, Vitamin B12 SANUM, Calypso® (Tremedici Co.)

Fig. 7: Basic treatment plan in the event of CWD infestation and mitochondriopathy

Therapeutic measures: correction of the pH level, sparing dissolution of the fibrin with MUCOKEHL, and dismantling of the CWD forms with a combination of Isopathics (NOTAKEHL, QUNTAKEHL, GRIFOKEHL) and the appropriate SANUKEHLS. Give CITROKEHL to improve the cell respiration, and SANUVIS to break down the lactic acid. Blocking the NO results in immediate pain reduction, therefore give injections of Vitamin B12 SANUM (see also Fig. 8).

Borreliosis

Chronic borreliosis indicates that the body is not producing enough NO gas (e.g. as a result of glutathione deficiency) and thus is no longer able to eliminate CWD forms, even though it can identify the borreliosis with the aid of SANUKEHL Brucel. (See Fig. 9)

Case Example: Rheumatoid Arthritis

CRP and Anti-CCP levels are often elevated, since fibrinogen is joining with citrullin (a product of NO breakdown) to form citrullinated peptides (CCP), which the body interprets as antigens. These are often easily visible in dark-field microscopy as networks or precipitation of filites. Thus antibody formation is induced and the auto-immune reaction is set in motion.

Nora D., an 18-month-old girl with most severe systemic juvenile chronic arthritis. Bouts of fever up to 40°C, painful swelling of the feet, pronounced symptoms of Cushing's syndrome with a moon-face, skin eruptions over large areas.

Orthodox treatment: antibiosis with Cefotaxim and Meropenem - unsuc-

- ALKALA N powder: 1 measuring-spoonful in the evenings before retiring, dissolved in hot water and drunk.
- Treatment by injection: MUCOKEHL, SANUVIS and CITROKEHL. Injection once weekly, or once a day 1 MUCOKEHL 3X suppository.
- Repair of mitochondria: SELENOKEHL, ZINKOKEHL, Vit. B complex, Vitamin B12 SANUM (1 injection once a week), Calypso® (Tremedici Co.) initially 1 capsule per 15kg body weight.

Fig. 8: Fibromyalgia treatment

- Basic plan for CWDs and Mitochondriopathy, plus
- SANUKEHL Brucel 6X, 8 drops once a day, or injection
- NOTAKEHL, 1 injection 2-3 times a week
- To raise NO whilst protecting Glutathion, and to repair the mitochondria: 3-6 capsules of Calypso® (Tremedici Co.) daily.

Fig. 9: Treatment plan for borreliosis

- NOTAKEHL suppository every other day, alternating with SANKOMBI 5X drops, 2-3 drops once a day
- SANUKEHL Staph 6X and SANUKEHL Strep 6X in daily alternation, 2 drops. 1 capsule of Calypso® (Tremedici Co.) per 15kg body weight

Fig. 10: PCP Treatment Plan

cessful. Ibuprofen®, 260 mg a day, Methotrexate® 2mg (per week), 10-18 mg Decortin® a day; for immunosuppression the child was given Cellcept® and as a TNF-blocker Etanercept® (Enbrel). Despite this medication the child was suffering with the complaints described above, the pain could not be controlled. The little girl was crying and whimpering almost all day long.

After two years, the University Clinic suggested to the parents, on account of "the unsatisfactory therapeutic situation, a more intensive course of treatment with Anakinra". They declined this, likewise an attempt at chemotherapy (Cyclophosphamide®).

At this point the parents informed the Clinic that they wanted to give Natural Medicine a try. Thereupon the doctor, disgruntled by this, suggested trying Contergan, which meanwhile was being used again in the treatment of chronic arthritis. The parents were thrown by this and came to me for information regarding alternatives. (See Fig. 10.)

Laboratory test results: Hb 6.4 g/dl, CRP: 15-26 mg/dl, leucocytes: 30,000-48,000/µl, thrombocytes: 835,000/µl, liver readings elevated; evidence of Streptococcus pneumoniae; in dark-field microscopy, high degree of infestation with CWDs and fibrin meshes.

After three weeks there was a clear improvement to be seen, with reduction of the skin eruption; Cortisone and painkillers could be reduced. A period without Methotrexate was tried, and when this passed successfully, gradually all the other medication was phased out. For two years now she has been completely symptom-free.

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First published in the German language in the SANUM-Post magazine (95/2011)

Statistical Evaluation of an Application Study with the preparation SANUKEHL Brucel 6X Drops

by Dr. Reiner Heidl

1. Introduction

A total number of 105 patients in four medical practices, one specialising in internal medicine, one in surgery and two in general medicine, participated between March 1992 and September 2000 in an application study with the preparation SANUKEHL Brucel 6X drops.

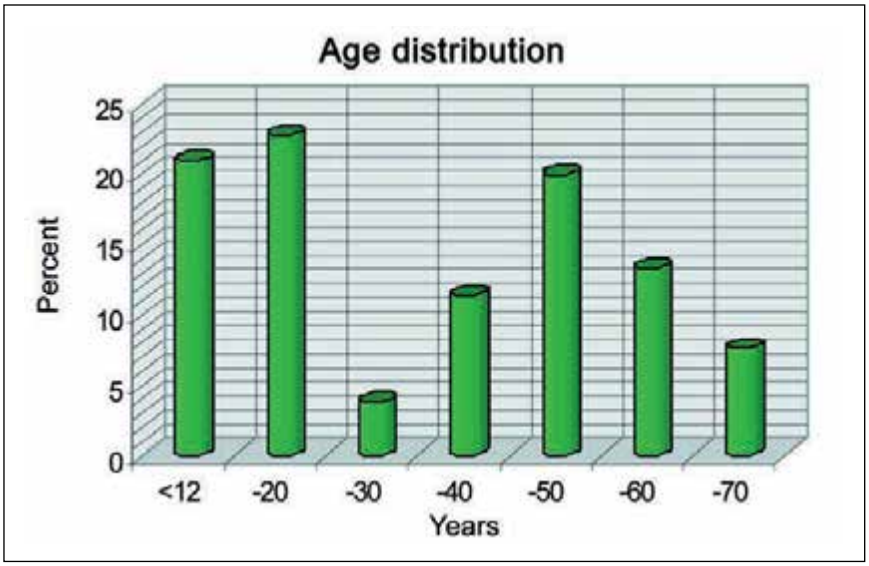
The homeopathic test preparation, SANUKEHL Brucel, consists exclusively of Brucella melitensis e volumine cellulae in the 6th decimal potency.

The aim of this application study was to determine the actual application of the preparation as well as its tolerance under the day to day conditions of a normal practice. It was also of importance to determine the acceptance of the preparation on the market, especially amongst children.

In line with the study's set-up, only descriptive statistical methods were used. The application of inductive methods was not indicated. An "intention-to-treat" evaluation was carried out, which means that all those patients who had at least received one dosage of the medicament were included in the study.

2. Participating Patients

105 patients participated in the study which comprised of 48 males (45.7%) and 57 females (54.3%). The age of the patients varied between 4 and 70 years, with an average age of 32.0 and a standard deviation of 19.6 years. Almost the same number of patients was in the groups under 12 years (21.0%), between 13 and 20 (22.9%) and between 41 and 50 (20.0%). In the group between 21 and 30 were only 3.8% of the patients. The groups between 31 and 40 (11.4%) and 51 and 60 (13.3%) were also of comparable sizes. In the group between 61 and 70 were 7.6% of the patients. No patient was older than 70 years. The males with an average age of 39.6 ± 18.4 were on average 14 years older than the females with 25.6 ± 18.2 years.



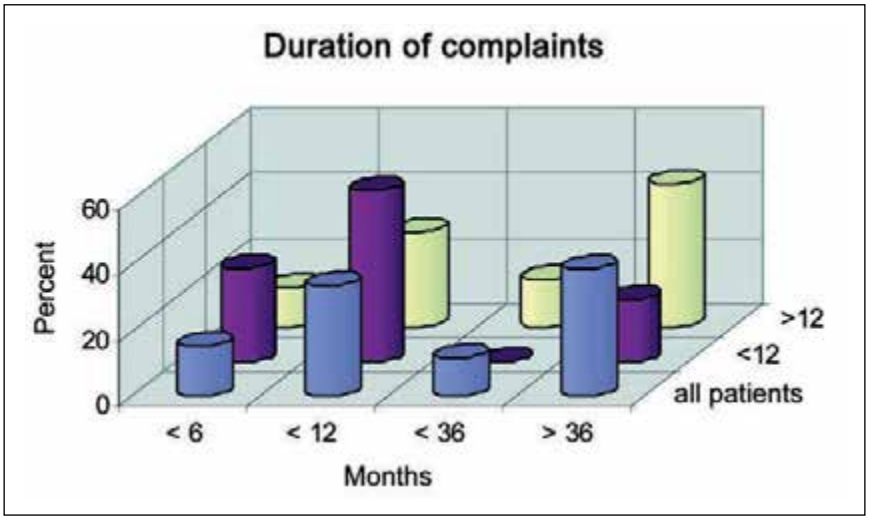
Height varied between 100 and 189 cm with an average height of 157.5 ± 23.0 cm and weight was between 14 and 99 kg with an average weight of 60.5 ± 21.0 kg.

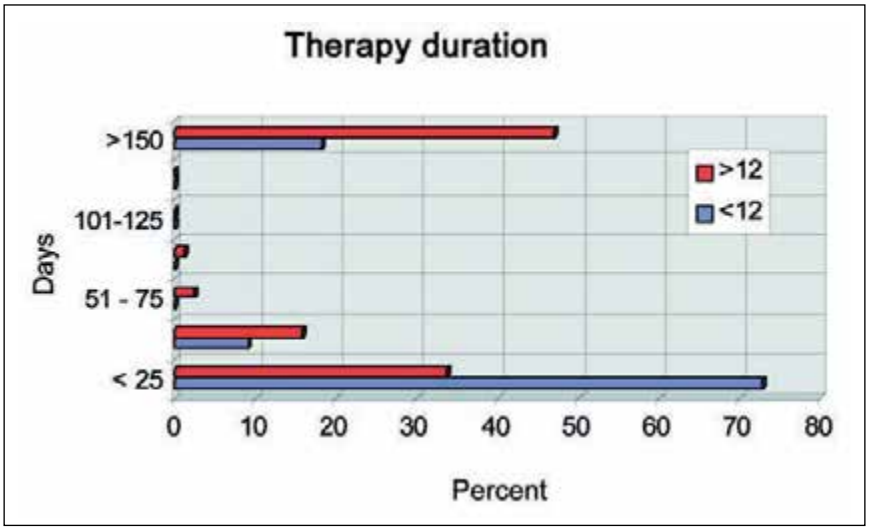
2.1 Diagnosis and Accompanying Diseases

The diagnosis leading to the prescription was to be entered in the study protocol. It showed that SANUKEHL Brucel 6X, according to Isopathy, is used in a very wide application range. The main indications were headache and migraine with children and adults alike, additional belly-ache and intermittent fever with children and arthritis and lumbar spine syndrome with adults. A diagnosis was made before the start and at the end of the therapy. Accompanying therapies were to be documented in the evaluation form.

In order to obtain a measure of chronic diseases, the patients were asked in the study protocol how long they had endured the disease or complaints. Time frames were given of less than six months, up to one year, up to three years and more

than three years. 15.5% of the patients had suffered complaints for less than six months. The largest group with 38.8% of the patients suffered for more than 36 months, 11.7% between one and three years and another large group of 34.0% for 12 months. The existence of the complaints was shifted more in the direction of acute conditions in the under 12 patients. 28.6% of these patients suffered for less than six months, 52.4% between six and 12 months and only 19% for more than 36 months. A suffering period of over 36 months was especially pronounced in 43.9% in the adult group of patients over 12 years. Only 12.2% of these patients suffered from acute complaints with a duration of up to six months, 29.3% between six and 12 months and 14.6% between 12 and 36 months.





Duration of complaints (months)	Total patient population (%)	Patients < 12 years (%)	Patients > 12 years (%)
< 6	15.5	28.6	12.2
< 12	34.0	52.4	29.3
< 36	11.7	0.0	14.6
> 36	38.8	19.0	43.9

3. Dosage and Duration of Treatment

3.1 Time of Consultation, Duration of Treatment

According to the nature of an application study, the physicians were not given a preset time limit for the final patient assessment. The final examinations were conducted after a period of 11 to 369 days, with an average of 136.0 ± 159.2 days.

Amongst the children (< 12 years) the therapy lasted on average 69.2 ± 104.7 days and was approximately 60% shorter compared with the adult group with 181.5 ± 165.3 days. The differentiated evaluation within specific therapy periods allows for a clear picture. It reveals that amongst the children (< 12 years) the therapy duration under 25 days was clearly in the foreground (72.7%) of all patients. Amongst the adults, the largest group was the one with more than 150 therapy days (47.0%) and only 33.7% were treated for up to 25 days.

3.2 Dosage

The dosage was set as follows, according to the patient information leaflet:

Oral application: for acute conditions: 5-10 drops (every 12 to 24

hours); for chronic conditions: 10 drops every second day.

External application: Every 1-2 days, 5 - 10 drops on the affected area or in the cubital fossa.

After eight weeks, the therapy should be discontinued for several months.

99 patients took the drops orally and 53 patients were treated externally. Multiple counts were necessary, as 48 patients were treated orally and additionally externally. The following table states the medium dosage of the application forms. The drops are related to the daily oral intake or external application respectively.

The recommended dosage was taken. In the group under 12 years, the drops for oral application were dosed according to age. The medium dose in monotherapy was 40% higher than that in the combination therapy. This comparison is not applicable with external application, as the external application in monotherapy was only applied in the children group and this would make a wrong impression compared with the adult group.

4. Comparison with Former Therapy

No patient underwent previous treatment with Sanukehl Brucel 6X drops in the past five years and, therefore, a comparison concerning efficacy and tolerance between first-time and repeated application users was superfluous.

5. Efficacy and Tolerance

5.1 Evaluation of Efficacy by Doctor and Patient

In a closing assessment, physicians and patients were asked to evaluate efficacy and tolerance. Efficacy could be assessed with "very good", "good", "moderate" or "no effect". The physicians were also requested to evaluate patient compliance with "very good", "good", "moderate" or "non-compliant". The evaluation of efficacy showed that 40.0% of the patients thought efficacy to be "very good" and "good", whilst 17.1% assessed the efficacy with "moderate" and 2.9% with "no effect". The results of the physicians' evaluation for efficacy were similarly positive as that of the patients. In 45.7% of the cases physicians assessed efficacy with "very good", 32.4% with "good", 20.0% with moderate and 1.9% with "no effect". The evaluation by physicians and patients alike was according to tendency significantly better in the adult's group than in the children's group. In the children group the indication "intermittent fever" stood clearly in the foreground. The moderate evalua-

Total Population			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	11.1 ± 5.7	4	20
Drops (topical)	6.3 ± 2.6	5	15

All Patients < 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	8.0 ± 2.2	4	10
Drops (topical)	5.0 ± 0.0	5	5

All Patients > 12 Years			
	Medium dose	Minimum dose	Maximum dose
Drops (oral)	11.9 ± 6.1	4	20
Drops (topical)	6.7 ± 2.9	5	15

Monotherapy / Combination Therapy (Total Population)				
	Medium dose	Minimum dose	Maximum dose	
Drops (oral)	12.8 ± 5.8	4	20	Monotherapy
Drops (topical)	9.2 ± 5.0	4	20	Combitherapy
Drops (oral)	5.0 ± 0.0	5	5	Monotherapy
Drops (topical)	6.4 ± 2.7	5	15	Combitherapy

tion of efficacy is possibly due to the fact that the application of the test preparation did not lead to a rapid reduction of fever. However, this is not the claim of the test preparation.

Compliance (N=102) was assessed by the physicians to be “very good“ for 51 patients and “good“ for 33 patients, hence 80% of all patients participating in the study were given a “good“ or “very good“ compliance rating. 17 patients were given a “moderate“ and one patient a “non-compliant“ rating.

5.2 Evaluation of Tolerance by Doctor and Patient

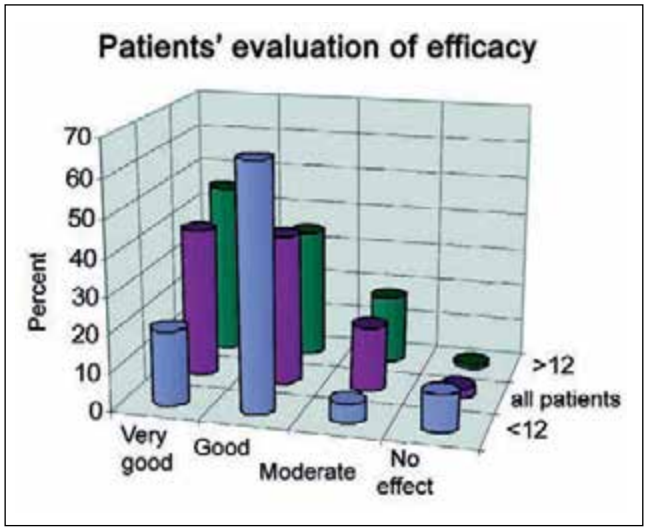
At the conclusion of the study, an evaluation of tolerance was submitted by the physicians and patients, whereby an assessment of “very good“, “good“, “moderate“ and “poor“ could be chosen. 58.1% of patients and 60.0% of physicians rated tolerance to be “very good“, whilst 35.2% of patients and 39.0% of physicians gave SANUKEHL Brucel 6X a “good“ tolerance rating. 5.7% rated with “moderate“ and one patient (1.0%) rated with “poor“. The physicians rated no case with “moderate“ and 1.0% with “poor“.

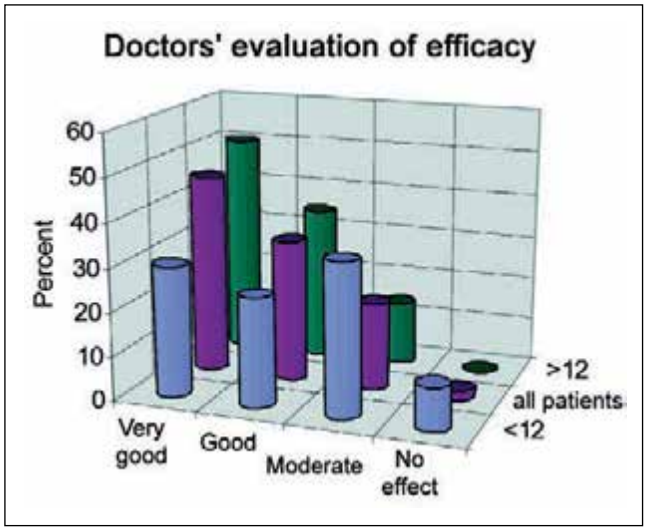
In the adult’s group over 12 years, patients and physicians rated tolerance with “very good“ and “good“ and a little better in the direction “very good“ than that of the age group under 12 years. In the younger age group, the evaluation was shifted from “very good“ to “good“ and no case was rated with “moderate“ or “poor“.

5.3 Side Effects and Discontinuation of the Therapy

The therapy with SANUKEHL Brucel 6X was discontinued after seven days with one 54-year-old male with the indication borreliosis. The dosage was 1x daily 8 drops orally. In the anamnesis, further diagnoses were hypertension, Raynaud syndrome and chronic diarrhoea. Additional to the test preparation, the patient was treated with MUCOKEHL, SANUVIS and RECARCIN injections. Always one day after a MUCOKEHL injection, he suffered from nausea, palpitations, tachycardia, sweating, trembling, weakness, chill and depression. The physician rated the frequency with “now and then“ and the intensity with “light“. As it was stated in the evaluation form that the side effects occurred one day after administration of a further preparation, it is uncertain if this can be plainly connected with the test preparation. Exclusively for this patient the tolerance was rated with “no effect“ by the patient and physician alike.

Evaluation of Efficacy								
Patient Group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	No effect	Very good	Good	Moderate	No effect
All patients	40.0	40.0	17.1	2.9	45.7	32.4	20.0	1.9
< 12 years	20.0	65.0	5.0	10.0	30.0	25.0	35.0	10.0
> 12 years	45.8	34.9	18.1	1.2	50.6	34.9	14.5	0





6. Summary

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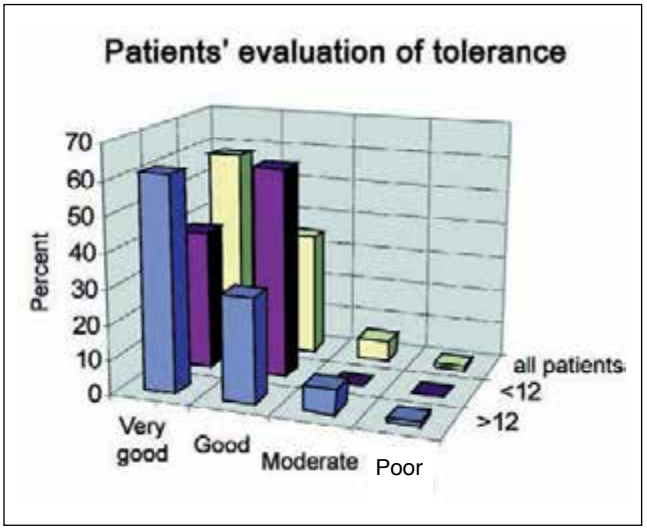
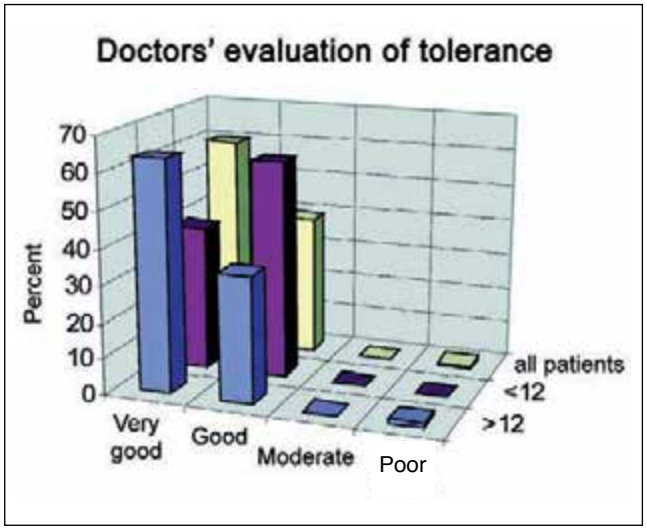
99 patients took the drops orally and 53 patients were treated externally. Multiple counts were necessary, as 48 patients were treated orally and additionally externally. The recommended dosage was taken. In the group under 12 years, the drops for oral and external application were dosed according to age. The medium dose in monotherapy was 40% higher than that in the combination therapy. This comparison is not applicable with the external application, as external application in monotherapy was only applied in the children group and this would make a wrong impression compared with the adult group.

The therapeutic progress was determined by evaluations conducted at the beginning and the end of the therapy. 80.0% of the patients and 78.1% of the physicians rated efficacy of the therapy with “very good“ and “good“. The evaluation by physician and patient was according to tendency much better in the adult’s than in the children’s group. For 80.0% of all patients participating in the study, compliance was certified to be “good“ or “very good“.

Evaluation of Tolerance								
Patient group	**Patients’ evaluation [%]**				**Doctors’ evaluation [%]**			
	Very good	Good	Moderate	Poor	Very good	Good	Moderate	Poor
All patients	58.1	35.2	5.7	1.0	60.0	39.0	0	1.0
< 12 Years	40.0	60.0	0	0	40.0	60.0	0	0
> 12 Years	61.4	30.1	7.2	1.2	63.9	34.9	0	1.2





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First published in the German language in the SANUM-Post magazine (98/2012)

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