



Bacteria and fungi

Two microbial phases governed by the energy milieu

**by
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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 microorganisms 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 micro-organisms.

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.

In later studies with mycobacteria, other authors apart from Enderlein were able to observe a pleomorphic



Illus. 1: Branching forms of *Mycobacterium tuberculosis* (from Coppen-Jonas, centre page of *Bakter. l. Orig 12, 1, 1895*).

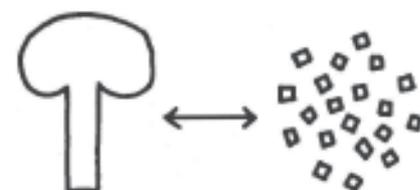
growth relationship. The following pictures (Illus. 2) show the formation of branches in *Mycobacterium tuberculosis* (gall.) until the growth resembles that of fungi.

Milieu conditions required for microbial growth

In the last few years the phase relationships in the growth of fungi has 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*“ [„*The Biology of Light*“] by Prof. Popp shows this change of phase in diagrammatic form.

This change of phase in the 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



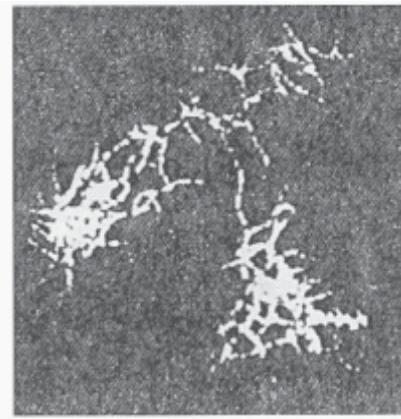
Illus. 3: Change of phase of the slime mould *Dictyostelium discoideum* (from Popp: „*Biologie des Lichtes*“, Parey, 1984).



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).

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,

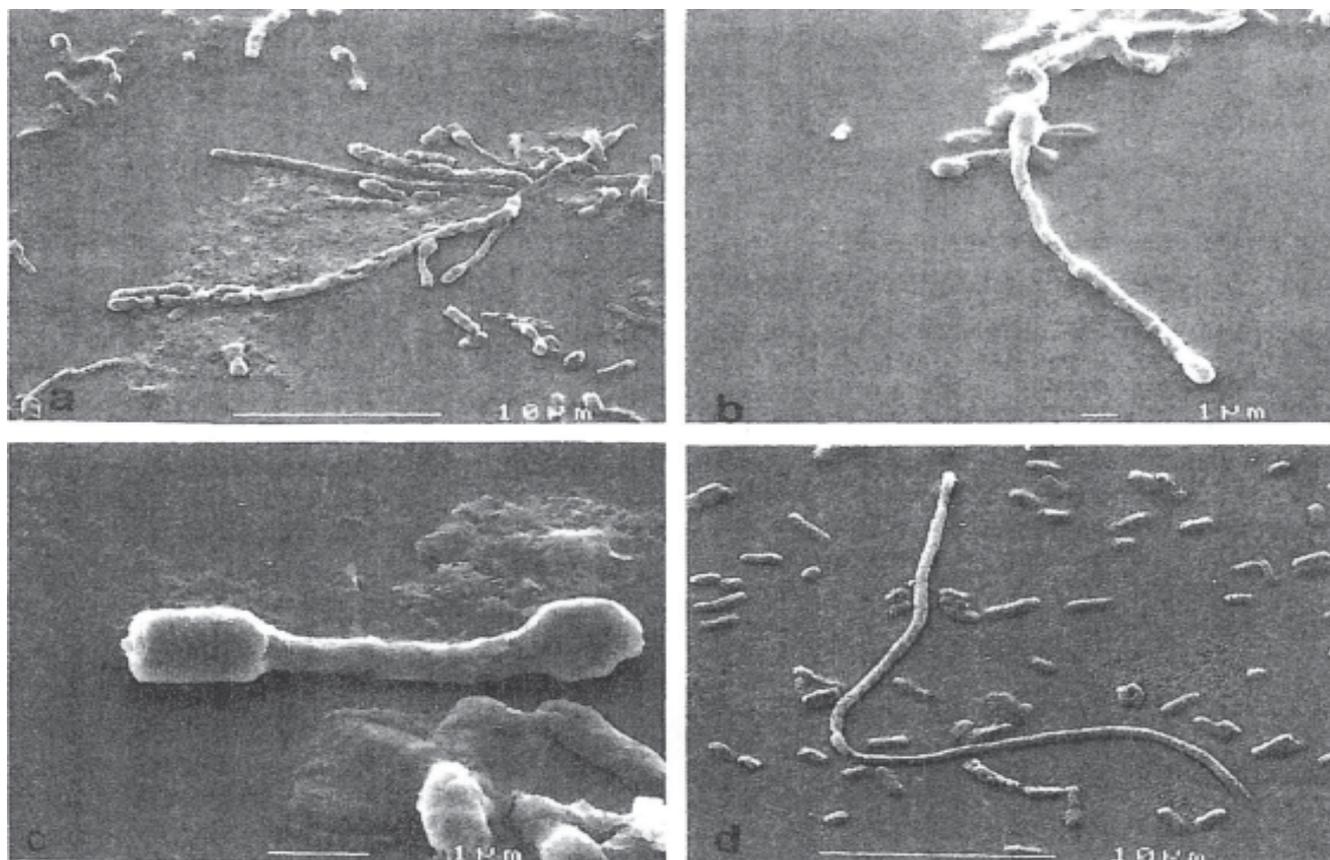
fungi and yeasts. Isopathic SANUM remedies, most of which still contain Enderlein's original strains and/or are manufactured in accordance with his original instructions, work on this principle.

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 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 microorganisms 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



Illus. 4: Gigantic pleomorphic growth of *E. coli* in a starvation culture (from Wainwright et al., *Letters in Applied Microbiology* 29, 227-229, 1999).

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“.

CWD forms of pathogenic microorganisms 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



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)



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 cycle 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.

On balance, therefore, 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 antibiotic 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 SANUM 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, RECARCIN,

UTILIN or UTILIN „S“ 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 Sal -> 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, RECARCIN, UTILIN 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 weekly; LUFFASAN at weekends; plus MAPURIT at midday and ZINKOKEHL in the evenings.

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