# Mitochondropathies – a challenge for holistic medicine

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"You'll just have to live with it," – this is the advice patients frequently receive from their doctors. Perhaps this leaves them wondering: do I really have to? Is there no possibility at all of improving my quality of life? Justifiably, people affected in this way cannot and will not resign themselves to their fate. They look for alternatives and often this brings them to us. But you know all this already.

The point is we are treating people and not "diagnoses". For a better understanding I would like to list some clinical pictures which challenge our medical knowledge, learning, thinking and actions. For instance I am thinking of: migraine, neurodermatitis, irritable bowel, ulcerative colitis, fibromyalgia, Chronic Fatigue Syndrome, MCS, exhaustion after viral infections, allergies, chronic pain in the musculoskeletal system, autoimmune illnesses, multiple sclerosis and cancers before, during and after conventional therapy.

I run a small private medical practice in the country for general medicine and naturopathy. A key focus of the work with the Bicom 2000 and the Bicom optima is diagnostics and treatment. I have a very experienced bioresonance therapist who supports me in this. Additionally I work with dark field microscopy after Professor Enderlein's method, acupuncture, homeopathy, kinesiology ... I see no conflict with traditional medical thinking and use modern laboratory diagnostics.

Especially for patients with the illnesses

mentioned here, the bioresonance method is decidedly helpful.

We work with the CTT (Combined Test Technique) and find time and time again among other things the following conditions: Problems with elimination, heavy metal and chemical stresses, bacteria, fungi, viruses and Parasites, food intolerances and allergies to wheat, gluten, cow's milk and sugar. Usually stresses from mobile phones, geopathies and immunisations also test positive. These findings occur so frequently that I even started to doubt myself and my measuring techniques. I therefore verified not only the suitability of the patient for testing, but also checked myself and the testing place for the effects of electrosmog.

We are often faced with people who are very concerned about their health. Seemingly these patients have various illnesses and are classed as multimorbid. They have been treated by competent consultants, specialists and subspecialists. As naturopathic therapists in thought and deed we look for causes, we try to see the whole picture and not just specific manifestations. I found the answer inter alia in newer literature on immunology by Dr. Heinrich Kremer and his "Stille Revolution der Krebs- und AIDS-Medizin" (Silent Revolution in Cancer and AIDS Medicine), and from Dr. Bodo Kuklinski and his numerous publications as well as other authors and colleagues. The search for a centre of disruption leads to the cell, the cell nucleus and to the tiny "powerhouses" - the mitochondria.

#### The significance of the mitochondria

Each human cell possesses at least 1500 mitochondria. With the help of oxygen, energy is created over a total surface of approx. 100,000 sq. metres. Virtually 90% of the ATP energy-bearing molecule is produced in the mitochondria of humans.

ATP cannot be stored and must therefore be prepared on an ongoing basis. So it is easy to understand that damage to the mitochondria leads to a considerable deficit in energy.

It is an interesting fact from the developmental point of view that mitochondria developed from proteobacteria. Around 2 billion years ago they were absorbed by protozoa. The algae in the oceans produced oxygen. Bacteria were able to use this whereas for other organisms it was toxic. The integration of the proteobacteria (mitochondria) provided many advantages for the primal cell. The oxygen, toxic to protozoa, was used by the mitochondria for the production of ATP.

They produce the preliminary stages of all steroidal hormones, cholesterol and vitamin D synthesis.

#### <u>Consequences of mitochondrial</u> functional disorders

The health of our cells depends mainly on the ability of the mitochondria to function. That is to say harmful effects on mitochondria can lead to a multiplicity of illnesses. Often multimorbidity is the consequence of mitochondrial functional disorders. The formation of nitric oxide is especially harmful (NO gas) leading to nitrosative stress. NO stress blocks the respiratory chain of the mitochondria and thus ATP synthesis. It activates the Cox enzyme, with familiar consequences that include chronic inflammation of the skin, the joints, the spine and the gastrointestinal tract.

NO stress inhibits haemoproteins, peroxidases and triggers autoimmune illnesses such as Hashimoto's thyroiditis.

The return flow of cholesterol through the gallbladder is inhibited resulting in hypercholesterolaemia. The disturbance of a multitude of complex biochemical processes sometimes also leads to serious illnesses such as type II diabetes mellitus, multiple sclerosis, Parkinson's disease, psoriasis, neurodermatitis, arthritis, macular degeneration, allergies, autoimmune diseases, migraine, CFS, MCS, obesity, food intolerances, ADS and ADHS ...

Knowing that mitochondria had their origins once in bacteria helps us understand their specific susceptibility. To defend against bacteria, viruses, parasites and intracellular microbes, the body forms NO gas. It comes from arginine and oxygen. The NO synthetase responsible for this is present in 4 isoenzymes; in immune cells, endothelial cells, nerve cells and as a mitochondrial isoenzyme. At the same time there are physiological processes of immune defence, vascular dilation, neurotransmitter action and the control of cell formation, cell death and the production of energy.

In this physiological framework the mitochondria are protected by glutathione.

As a result of overproduction of NO, for example in the case of chronic infections, glutathione is used up. If we now think about the detoxification function of glutathione and its depletion in the case of mercury poisoning, mitochondria can no longer be adequately protected.

An organism fights to prevent irreversible damage and blocks the mitochondrial respiratory chain. Accordingly, the functional disturbances may be either reversible or permanent.

Damage to mitochondrial DNA may be inherited from mothers. A typical example is migraine.

An acquired mitochondriopathy may result from:

- Treatment with antibiotics especially long term (which may result in damage to DNA)
- Antirheumatics MTX, hydroxychlorquine
- Heavy metals
- Statins (so-called lipid reducers)
- Xenobiotics (toxins, environmental poisons)
- Chemotherapy
- Antiepileptic drugs
- Cervical spine instability at C1/C2 (Dr. B. Kuklinski)
- Mobile phones
- Stress
- Endogenous or exogenous nitric oxide due to food or medication ...

I would expressly like to emphasise that we are not dealing here with the rare classic congenital michondropathies affecting children and young people and which are associated with high lethality before the age of 30. Only these are known and accepted in conventional medicine at the present time.

The forms described here take a gentler course. If they are left untreated, however, progression occurs. In the foreground are symptoms from those organ systems which are especially reliant on energy. We see neuropathies, myopathies, enteropathies and immunopathies. A few special laboratories offer chemical laboratory tests to find evidence of NO stress, vitamin B12 deficiency and intracellular deficits.

#### Therapeutic recommendations

The therapeutic recommendations begin quite logically with the avoidance of harmful trigger stimuli (noxae). Stresses caused by the workplace are problematic, but even more difficult is the problem with medication. This is where I really come into direct conflict with conventional medical "guidelines". Only an explanation to the patient and a careful but self-confident

action with awareness of problems help here.

Numerous microfoods are recommended for treating mitochondriopathy.

Coenzyme Q10, vitamin B12, vitamin B2, vitamin B6, vitamin B1, vitamin K, vitamin E complex, magnesium potassium zinc, vitamin C, omega 3 fatty acids, vitamin D, vitamin A, biotin, thiamine as well as carnitine, alpha lipoic acid, glutathione and in particular curcumin.

A diet, usually ketogenic, which is also adapted to the patient's needs and tolerability is also a part of the treatment.

In patients who have a considerable deficit in microfoods and suffer from long-term illnesses and multiple allergies such as MCS (multiple chemical sensitivity), often substances for deficiencies or especially helpful substances such as zinc or alpha lipoic acid are not well tolerated. You need to have a very good knowledge in the fields of biochemistry, physiology and orthomolecular medicine in order to be able to proceed in the right way.

#### <u>Treatment of mitochondriopathies</u> <u>with the Bicom 2000 and the</u> Bicom optima

This is where a reliable and intelligent naturopathy-based test and treatment procedure comes into its own. In my practice we have been working with the Bicom 2000 device, and since June 2009 with the Bicom optima too.

With both devices and using the "Combined Test Technique" (CTT) we can diagnose the already mentioned typical stresses associated with mitochondriopathies. Almost invariably allergies and food intolerances are implicated.

We always test for impaired elimination and usually also for stress to the interstitial cell tissue. Accordingly there is a need for

treatment in several elements with the typical detoxification organs.

The mitochondriopathies represent a challenge for the medicine of the future. They are, among other things, also the consequence of many a "sin" committed in the modern age and by modern medicine.

So as we have learnt from working with the Bicom, we also proceed for these illnesses in this way: At the beginning there is the detailed patient history. Patients feel accepted and it is only after specific questioning that we find out about many of their problems and causal and time relationships become known and we start to document the course and success of treatment.

Our next step is thorough testing using the CTT where we gain an initial overview and where we still have some time left for the first treatment. Patients with complaints which can be assigned to mitochondriopathies are among the "poor detoxers". Their cleansing and regulation system is overloaded. We begin therefore with a basic program and the stimulation of detoxification - we "open the eliminating organs". Once the patient's ability to be treated is confirmed, I like to use the program sequence K-no. 10046/ 430/480/930 or work with the eliminating organs from the 5 elements test set. Channel 2 of the Bicom optima is equipped with the appropriate supportive substances. This is a real bonus.

We decide on the selection after testing with the tensor or also testing kinesiologically. We have put together a range of phytotherapeutic, homeopathic and orthomolecular substances for this purpose. Using the Bicom 2000 we use the test programs on offer.

I feel both these options are almost pleasant for such patients. We can select from the recommendations of experienced therapists (the above-mentioned microfoods) and our own knowledge of substances and then test for the benefits and tolerability and obtain confirmation of how to proceed with treatment. If there is good tolerability I recommend these preparations as a substitution. Very sensitive patients receive applications by chip or Bicom oil. Especially in the case of, neuropathies and MCS this procedure has proved its worth. Usually this concludes the first session.

In further sessions the obstacles to healing are treated in the usual way. Immunisations, mobile radios, scars and geopathies are treated and later re-tested.

In subsequent stages of treatment we work on stresses such as those caused by heavy metals, chemical substances, occupational noxae and mycotoxins.

Patients with mitochondriopathies always need support time and again when it comes to elimination.

We also repeat the search for parasites, bacteria and fungi – they are not always evident at the outset!

From the degenerated cells test set I also test the ampoule "eliminate chemotherapy" even if a malignant disease is not present. This can be necessary after antirheumatic treatment and prophylaxis for malaria.

Dr. Kulinski has shown in numerous studies that instability of the cervical spine at C1/C2 caused by inappropriate stress leads to an increase in NO gas formation. This may be a consequence of seemingly minor injuries after whiplash injury to the cervical spine or through falling. Hypermobility in this region is difficult to prove radiologically.

If there is any reasonable doubt – look at the patient history. We test the orthopaedic set overall and specifically C1-C2. In the case of positive findings patients profit from the temperomandibular joint correction program no. 530.2 and /or 570.9 Then, based on the test and using the orthopaedic

set, treatment can be carried out or using a cervical spine program, but not both in one therapy session and only after checking. Patients with instability in the neck region must be spared excess demands in everyday life and sport and chiropractic therapy avoided.

Here I am happy to recommend osteopathy or gentle methods.

In the case of every mitochondriopathy we observe a deficit in microfoods. In our practice we are happy to work to Sissi Karz's methods. If the "tissue point, chronic degenerative" tests positive then we treat it with program no. 923.3/923 on the left acromioclavicular joint. This program always takes up a lot of time.

In the following sessions we test the vitamin and food point using Sissi Karz's methods.

Any deficit still found is treated and if there is tolerance, substitution prescribed. After this stage of therapy a retest of food intolerances is carried out. Mostly they are already clearly reduced in number. Usually wheat, gluten and cow's milk allergies persist. The E numbers must likewise be retested once again even if they were negative at the start. An intolerance to preservatives 8 with nitrites and nitrates points indirectly to nitrosative stress. For example, there is little point trying to make a female migraine patient tolerant to nitrite and nitrate salts only for her then to go away and eat sausages, cold cuts or ham.

She simply must avoid this because her body already has to bear a nitrosative stress.

We are dealing with a toxic problem and not an allergological one.

Mitochondriopathies are mostly incurable. The symptoms can be reduced or calmed, but they usually reappear as soon as stresses occur from nitric oxide, xenobiotics, stress, mobile phones, medication or excessive stress on the cervical spine.

I consider myself fortunate to have the chance of diagnosing and treating using Bicom therapy and to help these people. Patients come time and time again to our practice and we have to improve the detoxification program, if need be detect new conditions and test for the requirement for microfoods. Vitamins and enzymes, which initially tested as necessary but poorly tolerated, can during the course of treatment become both tolerated and in fact no longer needed.

Patients come willingly for treatment because they experience relief and gain improved quality of life. During the sessions there is also the chance for counselling. The Bicom tells us a lot about patients. What troubles them physically, what they need, where their deficiencies lie, what is harmful to them and which organ systems need help ...

With this information, combined with our personal and professional experience and understanding of our patients, we are able to do a lot of good and find fulfilment in our work.