
Results of treating intracellular infestation by *Borrelia* and other micro-organisms

Alan E. Baklayan, Naturopath, Miinchen

CURRENT SITUATION

Borrelia infection was originally regarded as an extremely rare disease caused by the spirochetes of *Borrelia burgdorferi*. It was thought, 30 years ago, that being bitten by a tick which was itself infected with spirochetes was the only transmission route.

Professor of Biology and author of the book "Cell wall deficient forms: stealth pathogens", Lida Mattmann, was able to isolate living *Borrelia burgdorferi* spirochetes from mosquitoes, fleas, termites, from semen, urine, blood and from cerebrospinal fluid. *Borrelia burgdorferi* spirochetes can infest tendons, muscle cells, ligaments and even actual organs directly. In the initial stages of the disease it is not always possible to see the classic red halo around the site of the bite.

Later, the disease may even affect the heart, nervous system, joints and other organs. We now know, and for me this is a very important distinction, that this infection is able to mimic a whole range of diseases so that we can assume that the aforementioned diseases, in turn, take various forms. Thus it would be conceivable for at least one of these chronic forms to be caused by *Borrelia* infection. This concerns diseases such as amyotrophic lateral sclerosis, Parkinson's disease, multiple sclerosis, neuritis, psychiatric disorders such as schizophrenia, chronic fatigue, heart failure, angina, irregular cardiac rhythm, fibromyalgia, auto-immune diseases such as scleroderma and Lupus erythematosus, inflammation of the eye, sudden deafness, attention deficit syndrome and hyperactivity, chronic pain, to name just a few.

It is important for us to understand that obvi-

ously not every patient with these symptoms has *Borrelia* infection. It remains to be proved, for example, that Parkinson's disease is always accompanied by *Borrelia* infection. Yet there is no longer any doubt that there is at least one form of Parkinson's which is, in reality, a *Borrelia* infection!

One of the main factors why *Borrelia burgdorferi* is so dangerous is that it can both survive and spread without a cell membrane, the so-called cell wall deficient (CWD) form. It is dangerous because many valuable antibiotics kill bacteria by breaking down these very cell membranes in the bacteria. And it is these very antibiotics which are then ineffective against *Borrelia* infection!

It is assumed that *Borrelia* infection is one of the world's fastest growing infections. It is estimated that, in the USA alone, 200,000 new cases come to light each year. Some experts assume that one in 15 Americans is infected. That would give a figure of around 20 million.

Dr. Robert Rowen knows a family in which the mother's infection has spread to five of her six children. So there also appear to be indications that it is transferred within families.

For example, Dr. Mattmann found evidence of *Borrelia burgdorferi* in a number of nervous disorders. 43 of 47 chronically sick patients were infected with *Borrelia*. She also investigated eight cases of Parkinson's disease and was able to culture *Borrelia* in all eight patients. Likewise, she was also able to culture *Borrelia* spirochetes in 41 cases of multiple sclerosis, 21 cases of amyotrophic lateral sclerosis and in all tested cases of Alzheimer's disease.

45th International Congress for Bicom Users, 29 April to 1 May 2005, Fulda, Germany

So it can be seen that diagnosing *Borrelia* is one of the most important tasks. Incidentally, not everyone who tests positive for *Borrelia* develops symptoms. A study conducted in Switzerland in 1998 found that only 12.5 % of patients infected with *Borrelia* develop symptoms.

However, they are referring here to severe clinical symptoms. In my experience, many minor symptoms such as occasional headaches, joint pain, abdominal pain etc. may stem from *Borrelia* or other intracellular micro-organisms. My testing indicates that at least 70 % of patients are infected with intracellular micro-organisms.

It is noticeable that many patients with *Borrelia* infection are also infected with other intracellular organisms. *Ehrlichia* are very often found in the white blood cells and *Babesia* in the red blood cells. Most patients have all three parasites. *Babesia* are not easy to treat. It seems that, in addition to Samento (Cat's claw) which we essentially always use for *Borrelia*, Artemisinin, which comes from *Artemisia* i. e. wormwood, should also be used. We generally use it anyway as part of classic parasite therapy.

Dr. Mattmann, who I quoted earlier, says that all of the cultures from 25 patients with fibromyalgia displayed a positive culture of cell wall deficient *Borrelia*. She also claims that tear fluid could contain *Borrelia*. Consequently transfer could also possibly take place through contact.

Leading paediatrician Dr. Charles Ray Jones, who has specialised in *Borrelia* infection, was able to detect *Borrelia* infection in 12 infants who were breastfed. Scientists at the University of Wisconsin have reported that milk may also be infected with *Borrelia*. So infection could take place through milk consumption. It is assumed that it is also possible to become infected through blood transfusions. The CDC (US Center for Disease Control) in Atlanta, Georgia states that its data indicates that *Borrelia* can also survive all the processes involved in blood transfusion!

AMYOTROPHIC LATERAL SCLEROSIS

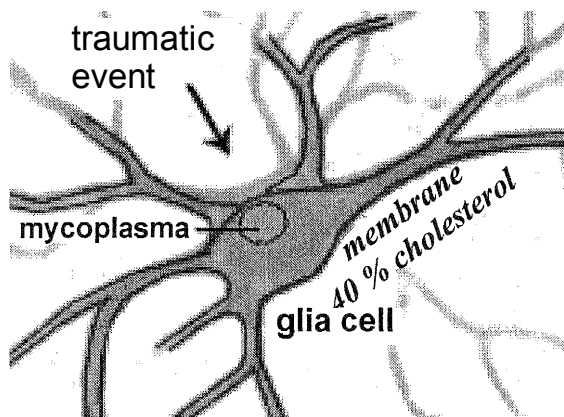
The neurotoxins which *Borrelia burgdorferi* produces can cause extensive neurological dysfunction in the central nervous system and, as a result, symptoms which are typical of amyotrophic lateral sclerosis. The most important symptom of

ALS is neuron degeneration which may lead to

the patient's death. Studies by Dr. Harold Clark and Dr. Garth Nicholson, also coordinated by Donald W. Scott, have led to a breakthrough in our understanding of amyotrophic lateral sclerosis. The story begins with the discovery of mycoplasma in 1898. Mycoplasma are living bacteria, nucleic acid particles, which do not have any cell membrane at all. M. Rottem et al. discovered in 1971 that mycoplasma are completely dependent on various early forms of steroid to grow. This contains cholesterol, amongst other things, obtained from animal and also human cells. These mycoplasma live quite harmlessly in their host cells until stimulated to become active by a traumatic event, e. g. a gunshot wound, an injury sustained in an accident or similar. I also include emotional trauma here.

When the mycoplasma start to grow, they will consume the cholesterol of the host cell until it dies. Mycoplasma have always been identified in ALS. In the 9 November 2001 issue of *Science*, Dr. Daniel Mauch et al. published that the glia cells of the neurons responsible for the motor system produce the extra cholesterol needed to repair and replace the ageing synapses. If this repair process is incomplete, the neuron cells begin to die as they are overworked.

The glia cells are also heavily involved in collecting, processing and storing glutamate. Raised glutamate levels have always been found in the brain cell clusters of ALS patients. One mycoplasma species, probably *M. fermenta*, which initially penetrated the glia cells quite harmlessly suddenly becomes active after a traumatic event. The mycoplasma begin to consume the cholesterol of the glia cells. Incidentally, this makes up 40 % of the membrane of the brain cells. And this causes the glia cells to rupture and die. The death of the glia cells, in turn, releases large amounts of glutamate which becomes raised in the brain membranes. This abundance of glutamate within the neurons combines with uric acid molecules. This urine molecule will then release an ammonium ion which converts the glutamate molecules into less dangerous glutamine. However, this urine molecule remains as a cyanate ion and this will, in turn, damage the mitochondria of the motor neurons. (Hence the use of ornithine and arginine which, as is well known, are able to untie the uric acid molecules in the brain).



- Mycoplasma activated
- consumes the cholesterol of the glioma cells
- glioma cells rupture and die
- glutamate levels in the brain membrane raised
- glutamate and uric acid molecule release ammonium ion
- glutamine and cyanate ion cause
 - damage to the mitochondria in the motor neurons
- lack of energy, weakness and tiredness
- neurons die off no information to the muscle membranes --> ALS

The consequence of this damage to the mitochondria is that this cell can no longer produce energy to be supplied to the neuron. This leads to the extreme weakness and tiredness also seen in patients with chronic fatigue. If the injury to the mitochondria is very extensive, the neuron will die. If the motor neuron dies, information will no longer be passed on to the muscle membranes and this is the overall symptom of ALS.

So this high cholesterol consumption may also explain the general hormonal dysfunction always seen with ALS if the cholesterol needed to produce oestrogen, testosterone, progesterone, hydrocortisone and aldosterone is too low. Patients with ALS, fibromyalgia and chronic fatigue very often have hypothalamic dysfunction and this, in turn, causes adrenal insufficiency, hypothyroidism and gonadal dysfunction.

UNHOLY ALLIANCE BETWEEN MYCOPLASMA AND BORRELIA!

These neurological abnormalities, in turn, very often reveal the alliance with Borrelia infections which we often test because Borrelia releases neurotoxins which are absorbed by the fatty parts

of the membranes present in the neurons in the brain and in the peripheral nerves. As a result, symptoms such as sudden deafness, Parkinson's disease, multiple sclerosis, peripheral neuritis too, even chronic pain can suddenly arise. It is assumed that Borrelia's neurotoxins block the membrane receptors. Probably by reacting very specifically with neurotransmitters and altering dopamine, serotonin and the acetyl cholin molecules. This, in turn, ultimately leads to the normal interaction with enzymes, coenzymes and hormones no longer functioning smoothly. This is just one of the pathological effects of Borrelia's neurotoxins. One example of many.

Consequently, in some patients with extremely severe Parkinson's symptoms, the very rapid improvements brought about by the use of Samento (Cat's claw) could sometimes be explained not only by the favourable immunological and bactericidal action of Samento on spirochetes, but by the fact that Samento blocks neurotoxic effects on cells and enzymes and hormones are therefore able to communicate with the cells again.

If this is the cause of chronic fatigue, one of the few tests we can perform is to give very high doses of coenzyme Q10 for two to three months, one 400 mg capsule once daily.

A very important and valuable clue as to why Borrelia infection has now become so aggressive appears to lie in its combination with the mycoplasma mentioned earlier. Mycoplasma are being discovered today which appear to have developed new strains, especially Mycoplasma fermentans which has exchanged DNA with Brucella. (There are many who are of the opinion that this was even cultivated in labs for biological warfare).

The high consumption of cholesterol when subjected to stress by the mycoplasma at the cell membranes (combined with the Borrelia neurotoxins, which also have an affinity to fatty tissue as a whole, especially that of the nervous system) could explain the increased aggressivity of Boneha infections today.

CO-INFECTIONS

In the event of Borrelia being detected, the following co-infections should be tested at the practice, namely Chlamydia, Gardia lamblia is often present, herpes viruses and brucellosis.

Another very important connection is that some therapists who use bioenergetic testing claim that

aspartame consumption, i. e. **aspartame** (constituents are asparaginic acid, phenylalanine and methanol which are strongly suspected of destroying the brain cells) in the blood, prevents Borrelia being removed from the body's cells. Consequently you should also test for aspartame and, if it tests positive, remove it from the diet.

Moreover, magnesium deficiency develops if Borrelia is present in the brain and electrolyte deficiency can occur through the effects which we have already referred to. Sodium and potassium in particular must be tested and checked.

Furthermore, a combination of folic acid and vitamin B12 is indicated for regenerating the nerves and a magnesium calcium combination also has a highly beneficial effect.

As you will see from all the cases described, we always test and treat parasitic infestation synergistically with Bonelia (i. e. combined together). This is one of the most important steps for Borrelia not only hide inside cells, they have also been found in parasites. If this parasitic infestation is not treated as well, the chance of success is reduced as the way to re-infection is opened if Borrelia escapes from the parasites. In my experience, parasitic infestation should also not only be analysed indiscriminately but precisely with the specific parasite ampoule and spontaneous breakthroughs are often experienced.

As you can see from the case histories, the following parasites have occurred in the past in connection with Borrelia:

Ascaris, Loa loa, Enterobius vermicularis, Trichinella spiralis, Heterophyes, Emytrema pancreaticum, Fasciola hepatica, Schistosoma mansoni, Strongyloides, Lambliia, Dirofilaria, Clonorchis sinensis, Ancylostoma caninum, Trichuris trichiura, Entamoeba histolytica, Trichomonas muris and vaginalis, Toxoplasma, Paragonimus, Plasmodium vivax.

All these parasites are contained individually in Regumed's large parasite test set.

Note! As a result, even once the patient has been stabilised and most of the symptoms have disappeared, therapy must be continued until every single parasite has disappeared if you want to avoid re-infection. Test Borrelia in all patients

- Stabilise patient and open elimination routes

Nevertheless, testing and, if necessary, therapy must be continued using the impulse generator which opens the intracellular space. I shall explain in detail in my workshop how this is performed in practice.

As the lifespan of the human cell is between 4 and 8 months, this gives a therapy period of at least 6 to 8 months, better still 12 to 16 months (see last year's paper "Intracellular micro-organisms"). During this period the principal medication **Samento** should not, in any event, be discontinued. A minimal dose of 2 to 5 drops 3 times daily, which is almost always sufficient, will cost the patient very little.

PARASITES AND BORRELIA

SUMMARY

- with Bicom technology
- Test orthomolecular remedies:
 - coenzyme Q10
 - L-Ornithine, L-Arginine
 - calcium-magnesium
 - vitamin B₁₂, folic acid
- Test Samento from the start 2 to 5 drops from 1 to 3 times daily
- Increase Samento very slowly (10 to 15 drops 3 times daily)
- Eliminate Borrelia carefully with **Bicom**
- Test and eliminate parasites, Parasite cures
- Use Regumed's impulse generator for therapy with 3.6 Hz and 1550 Hz, both for 3 minutes or test time
- Ask to see the patient at longer intervals and test Borrelia in the intracellular space and test parasites and treat, if necessary.

Note! The procedure for treating intracellular micro-organisms with Bicom technology is described in detail in my lecture from last year's Congress entitled "*Die Bedeutung der intrazellulären Hintergrundbelastung bei chronischen, rheumatischen und neurologischen Erkrankungen*" [*The significance of underlying intracellular stress in chronic, rheumatic and neurological disorders*] in RTI Volume 28, pp. 35-41.

DOCUMENTED CASES

Note: With all patients, careful elimination, stabilisation and blockage and parasite therapy was performed using Bicom technology from the first day onwards. As soon as there was a sign of slight stabilisation, additional support was provided by introducing the impulse generator and increasing the Samento dose. The impulse generator with 3.6 Hz and 1550 Hz frequency is particularly suited to treating *Borrelia* infection. Treatment time and intensity (volt) were tested out.

Patient B.T., male, born May 1971

Symptoms: chronic fatigue syndrome, pain in muscles and joints, progressive stiffening of the thoracic spine, heart trouble.

Diagnosis: parasites (*Ascaris*, *Loa loa*, *Enterobius*, *Trichinella*, *Heterophyes het.*, *Eurytrema*), moulds, yeasts, *Borrelia* and *Chlamydia* were tested in the patient.

By carefully treating these conditions with Bicom, the impulse generator and orthomolecular substances, the fatigue and heart trouble was cleared up, yet the muscle and joint problems improved only slightly. Only when the *Borrelia* infestation was treated with Bicom and Samento did the situation visibly improve.

The patient is now symptom free and able once again to pursue his hobby, mountaineering, to the full.

Patient B.M., male

Symptoms: polyneuropathy of the hands and feet with progressive muscular dystrophy. A chronic progressive inflammatory process of unknown origin had been detected in the nervous system with orthodox medicine.

Diagnosis: the patient was contaminated with environmental toxins, radiation, parasites (*Fasciola hepatica*, *Trichinella*, *Schistosoma*, *Ascaris*, *Strongyloides*) and mycoses.

Borrelia burgdorferi was diagnosed as the main factor affecting the nervous system.

By treating with orthomolecular substances, Bicom and the impulse generator, above all by *Borrelia* therapy supported by Samento, the chronically inflammatory process was arrested.

Evidence of this was also provided by orthodox

medicine.

Patient D.E., female, born May 1930

Symptoms: extreme pain in the extremities with progressive limited mobility, nerves generally affected, discharge from nipple, cyst formation diagnosed by orthodox medicine. The patient also complained of severe physical exhaustion. In addition, the patient complained of considerable variation in blood pressure and heart trouble.

Severe *Borrelia* infestation was diagnosed in October 2002 using orthodox medicine. This could not be treated due to a life-threatening allergy to antibiotics. The skin on the face was very red and covered with pustules. Diagnosed by orthodox medicine as rosacea.

Diagnosis: Environmental toxins as well as parasites (*Ascaris*, *Enterobius*, *Lambliia*, *Trichinella*, *Dirofilaria*, *Strongyloides*, *Fasciola hepatica*, *Clonorchis sinensis*), mycoses and viruses were diagnosed in the patient's nervous system.

The patient was also severely contaminated with heavy metals.

The symptoms improved visibly following treatment with orthomolecular substances, Bicom and impulse generator.

The muscular complaints and rosacea initially only improved imperceptibly.

Rosacea cleared up quickly following treatment for *Demodex* (hair mite!).

The muscular complaints diminished visibly when *Borrelia* therapy was started. It should be stressed that the symptoms disappeared completely when Rife frequencies were introduced as well and high doses of Samento were administered.

There is orthodox medical evidence that the *Borrelia* titre has fallen dramatically.

Patient F.J., female, born January 1973

Symptoms: shaking in the legs, general paraesthesia, digestive problems.

Diagnosis: PCB was severely blocking the patient's responsiveness. Heavy metals, parasites and mycoses were also tested. There was also abnormal bacterial colonisation of the intestine.

Severe infestation by *Borrelia* and *Chlamydia* constituted the main cause of the paraesthesia.

It also proved important to eliminate a previous tetanus and polio inoculation.

The shaking in the legs and paraesthesia have not recurred since treating the Borrelia with the impulse generator, Bicom and Samento.

Patient E. H., female, born March 1950

Symptoms: defective concentration, loss of memory, tiredness and inertia.

Diagnosis: environmental toxins, parasites, mycoses, heavy metals and Borrelia were tested in the patient. The patient reported being bitten by ticks when she was young.

Initial treatment of the environmental toxins, heavy metals, parasites (Ascaris, Enterobius, Dirofilaria) and mycoses certainly improved the patient's condition but it was not a resounding success.

Only when Borrelia therapy was begun, did the symptoms improve perceptibly.

When the Borrelia frequencies of Rife and Samento doses were included in treatment, this produced a resounding success.

The patient reported her concentration and memory had improved tremendously.

Patient E. M., female, born February 1947

Symptoms: menopausal symptoms, flatulence, diarrhoea, generalised joint trouble.

Diagnosis: parasites (Ascaris, Ancylostoma, Trichiuris, Amoeba), bacteria, mycoses, viruses and Borrelia tested positive.

The menopausal and digestive symptoms improved visibly following treatment with orthomolecular substances, Bicom and the impulse generator.

The joint trouble persisted undiminished however.

Only when Borrelia treatment was begun using Bicom and Samento did the joint problem improve rapidly.

Now the patient no longer has any trouble climbing stairs.

Patient G. W., male, born November 1954

Symptoms: irritation of the mucosa of the whole digestive tract, racing heart, extremely susceptible to colds, stiff in the mornings.

Diagnosis: the patient tested positive for environ-

mental toxins, parasites (Fasciola hepatica, Schistosoma, Ascaris, Trichinella, Trichomonads), abnormal bacterial colonisation of the intestine, severe geopathic stress and Borrelia burgdorferi. He reported having been bitten by ticks in 1980.

Apart from the stiffness in the mornings, all the patient's symptoms improved perceptibly following treatment with orthomolecular substances, Bicom and the impulse generator.

The stiffness in the mornings was only visibly reduced once Borrelia therapy was initiated with Bicom and Samento.

Patient G. N., male, born October 1999

Symptoms: acute tick bite at the back of the head resulting in bluish-purple swelling of the left ear.

Diagnosis: with orthodox medicine Borrelia infestation titre of 106, EAV testing, environmental toxins, parasites (Enterobius, Lamblia, Trichomonas muris) and Borrelia.

The swelling of the left ear subsided quickly following treatment with orthomolecular substances, Bicom and the impulse generator, and especially with high doses of Samento. The treatment is being continued.

Patient G.J., female, born March 1959

Symptoms: pain in the joints, flatulence and varying consistency of stools, disturbed sleep, headaches, vaginal mycosis.

Diagnosis: severe geopathic stress was tested in the patient. She was also infected with parasites (Heterophyes het., Toxoplasma, Ascaris, Ancylostoma, Lamblia, Trichomonads), mycoses and viruses. Severe abnormal bacterial colonisation of the small intestine was tested. Borrelia tested as the main cause of the joint trouble. In addition, severe Chlamydia infestation was detected. The patient was continuously being bitten by ticks as she works outdoors.

The patient was treated with orthomolecular substances, Bicom and the impulse generator. The patient's condition improved visibly. The joint trouble improved increasingly when the Borrelia was treated with Bicom and Samento.

Patient G. A., **male, born October 1935**

Symptoms: strong desire to urinate, at times with incontinence, general digestive problems, extreme hoarseness, excruciating pain in the back of the neck and shoulders.

Diagnosis: pronounced geopathic stress was detected in the patient. Environmental toxins, parasites (Ascaris, Paragonimus, Enterobius, Trichomonads, Schistosoma, Ancylostoma), mycoses and Borrelia were also tested.

The symptoms had been present since childhood.

The patient's symptoms improved dramatically after about four months' treatment. Incontinence has not recurred since.

The extreme pain in the back of the neck and shoulders only improved however once Borrelia therapy was introduced. Here too high doses of Samento brought about a marked progress in therapy.

The patient was finally able to pursue his gardening without suffering pain.

Patient K. S., **female, born December 1974**

Symptoms: the patient suffered a "total breakdown", any food she ate resulted in her circulatory system collapsing. Her immune system no longer responded, she reported that she contracted every conceivable illness. Complete exhaustion prevented the patient from taking an active part in life. She remembered being bitten by a tick in 1991.

Diagnosis: geopathy, electrical smog, environmental toxins, heavy metals, parasites (Fasciola hepatica, Enterobius, Dirofilaria, Strongyloides, Plasmodium vivax, Ascaris, Trichinella, Toxoplasma), mycoses, bacteria (Chlamyd. pneu., Chlamyd. trachoma.) and viruses all tested positive.

Treatment was initiated with orthomolecular substances, Bicom and the impulse generator. Success varied initially. The patient certainly recovered slightly yet her condition did not remain stable.

Only when Borrelia was tested and treated with Bicom and Samento, did the patient's situation

improve dramatically. The patient's health is now fully restored.

She is once again able to run her business successfully.

Patient L. B., **female, born April 1963**

Symptoms: extreme fatigue and exhaustion, paraesthesia on the left, could not lift her arm at times, severe flatulence, alternate diarrhoea and constipation, ovarian cysts.

Diagnosis: the patient was severely blocked with heavy metals and environmental toxins. Epstein Barr virus tested on the lymph meridian.

The patient was also infested with parasites (Clonorchis, Ascaris, Ancylostoma, Lambliia, Schistosoma, Strongyloides, Enterobius), mycoses, bacteria and Borrelia.

Careful thorough therapy with orthomolecular substances, BiCom and the impulse generator restored the patient's health fully. The parasthesia disappeared completely once Borrelia therapy was introduced with Bicom and Samento.

SUPPLIERS AND INFORMATION

- Samento (Cat's claw) / DermaVit KG
- Orthomolecular substances / DermaVit KG
- Impulse generator 3.6 + 1550 Hz / Regumed
- Parasite test set Dermavit / Regumed

DermaVit Dermatologischer Vertrieb GmbH & Co. KG

Unterer Anger 15 Rgb., 80331 Munich, Germany
Tel.: 00 49 (0)89 265635,

Fax: 00 49 (0)89 23269768

[Email: info@derma-vit.com](mailto:info@derma-vit.com)

REGUMED Regulative Medizintechnik GmbH
Hans-Cornelius-Str. 4, 82166 Grafelfing, Germany

Tel.: 00 49 (0)89 854 61 01,

Fax: 00 49 (0)89 854 61 03

[Email: info@regumed.de](mailto:info@regumed.de)