The Integrative Lyme Disease Therapy Concept with "Antibiotic Augmented Thermo-Eradication"(AAT). A new Treatment Approach for curing Lyme disease(LD)

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Introduction:

"Until the beginning of this century" St. George Hospital was a specialized institution for cancer therapy in all stages. Since its foundation 25 years ago, we developed an integrative therapy concept for our cancer patients this is an intelligent combination of conventional cancer medicine with scientifically based complementary treatment modalities, including local and systemic hyperthermia. The protocol is so successful that patients from all over the world come for treatment at St. George Hospital. Due to the nature of this treatment being less aggressive than other conventional approaches, it is very well-tolerated and produces a higher response rate with longer lasting effects. It improves both quality of life and life duration.

Fig. 1 St. George Hospital

How did we discover the use of AAT in the treatment of Lyme Disease

In early 2000, we had two patients with advanced breast cancer, one from the USA and one from Canada. Both came for cancer treatment, but both claimed that they were suffering more of Lyme disease symptoms than of their cancer. We associated all symptoms with their advanced cancer and their previous treatments, especially the pain and fatigue. After the patients had their treatment with whole body hyperthermia over 2 hours at 41, 6°C (106.8°F), they both told us independently that their Lyme symptoms had disappeared. At that time, our knowledge about Lyme disease (LD) was not very profound, but still deep enough to discuss in our conferences if it could be possible that heat exposure over a long period of time could be a treatment modality for LD, which as we knew was is caused by a tick-borne spirochetal
bacteria. We went to the literature and found the answer, which would become the basis for the development of our "Antibiotic Augmented Thermo-Eradication" (AAT) for chronic LD, inaugurated by me and my clinical team. To explain this in little more detail.[5]

Fig. 2 Dr. med. Friedrich R. Douwes inaugurated AAT for chronic Lyme Disease

Appropriate and early antibiotic treatment can be successful in the early stage of the disease but in the later stages it fails.

An infection with Borrelia burgdorferi can progress from a characteristic expanding skin rash, erythema migrans (EM), to a wide variety of nonspecific systemic symptoms that can affect any part of the body. Appropriate and early antibiotic treatment can successfully treat many with the infection.[3] However, in some people a tick bite can lead to disseminated infection and to disabling physical, cognitive, and psychological manifestations. Some people manifest with multiple systemic symptoms that can occur throughout the body, which lead to a complex syndrome.

Advanced late stage LD is difficult to diagnose and frequently not correctly diagnosed by conventional medicine. Therefore, many of our patients have seen numerous physicians of different subspecialties before the diagnosis was established. Their suffering is made worse as they often face difficulties from skeptical medical and insurance communities. The blood tests to diagnose LD are highly unreliable and sick patients often go from doctor to doctor searching for help and answers. A maximum of thirty days of antibiotics is the accepted standard of care for LD. If patients say that they did not get better, they are frequently diagnosed as having "post-Lyme syndrome," chronic fatigue syndrome (CFS), or myalgic encephalomyelitis (ME) or fibromyalgia. They are then given an antidepressant, pain killers and other symptomatic drugs and are told to live with their symptoms.[2]

When a child gets infected with LD and can't concentrate in school and/or shows a decline in their grades and attention span, then the child may be given an "Attention Deficit Disorder" (ADD) diagnosis. They are typically given stimulant medication and sent for behavioral therapy. This may help some of the symptoms, but fails to cure the root of the problem.

The cause for the multiple systemic problems from Lyme disease.

Patients who complain of chronic fatigue, fevers, sweats and chills, stiff neck and headaches, light and sound sensitivities, dizziness, memory and concentration problems, joint aches and muscle aches that migrate around the body, tingling, numbness and burning sensations, chest pain, palpitations and shortness of breath, gastrointestinal problems, resistant urological problems, sleep disorders, and different psychiatric symptoms may have chronic Borreliosis or LD, even if the routine test are not positive. The cause for the multiple systemic problems from Lyme disease are the chronic infection, the bio toxins and neurotoxins and the "silent inflammation" produced during the course of the disease. Because of the variety of symptoms and manifestation in different organs and tissues, Lyme disease (LD) is therefore often referred to as "the great imitators."

The medical system, however, has a lack of understanding of how to treat chronic diseases including chronic LD and cancer.

Modern medicine is very effective in providing help for acute diseases, like strep throat, acute bronchitis or pneumonia, urinary tract infections, and acute surgical emergencies. But the medical system, however, has a lack in understanding how of to treat chronic diseases including chronic LD and cancer.

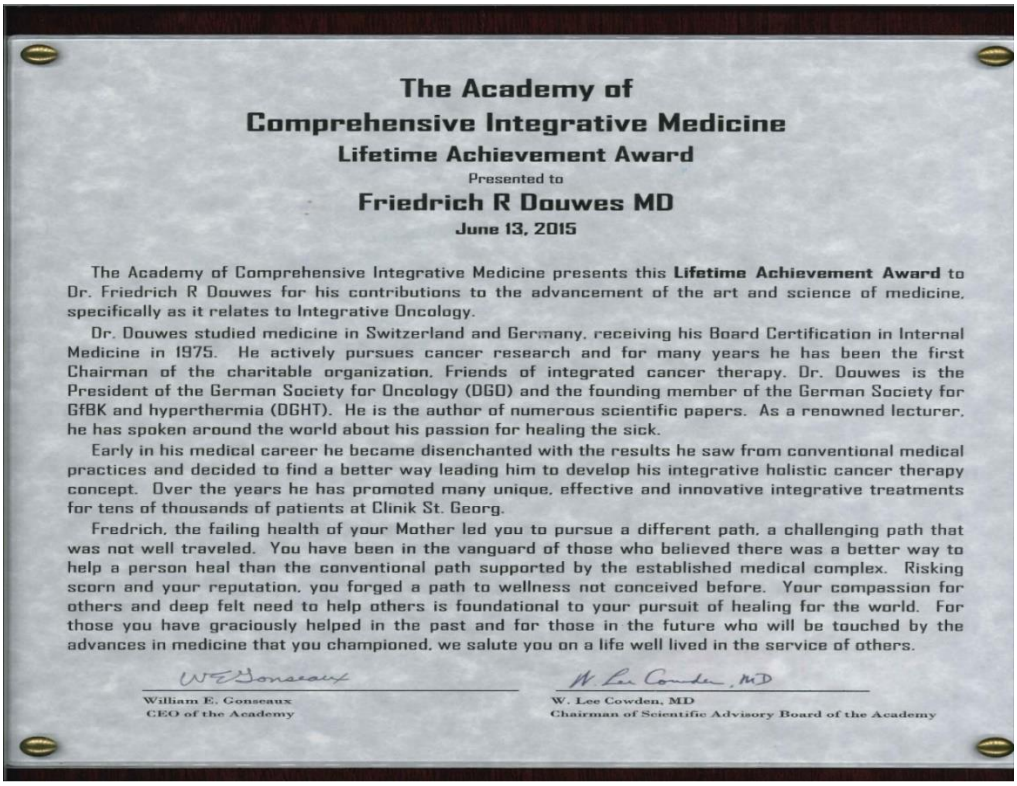
We have successfully treated thousands of people over the last forty years with cancer and since approximately 15 years also patients with Lyme disease. Both cancer and Lyme disease are often given simplified medical labels, but both have multiple systemic syndrome and therefore need a complex multifaceted approach. The "One germ, one disease," or one silver bullet approach is no longer feasible, at least not for our patients. We need a new paradigm to diagnose and treat these chronic diseases, similar to that paradigm which we use in our "integrative cancer therapy conception" (ICTC).

Chronically ill patients with multiple systemic syndrome, no matter which diagnosis we may give them, often have simultaneous multiple bacterial, parasitic, viral, and fungal coinfections and also very importantly they often have associated hormonal and immune dysfunction, large amounts of environmental toxin loads, mitochondrial dysfunction, allergies and functional metabolic abnormalities, chronic inflammation, sleep disorders, and underlying psychological dysfunction.

If you want to treat patients with such a multiple systemic syndrome successfully you need a complex treatment approach.

I have spent more than forty years of medical practice treating cancer patients, often with good success. I have shared my clinical and research results with colleagues here in Germany, in Europe, in the US and in Asia at scientific meetings and in publications. In addition, a number of colleagues visited us to learn and to exchange knowledge.

Several colleagues did their internship and residency in St. George Hospital here in Germany. Last year I received from the ACIM (Academy for Integrative Medicine) a lifetime award.



The Academy of
Comprehensive Integrative Medicine
Lifetime Achievement Award
Presented to
Friedrich R Douwes MD
June 13, 2015

The Academy of Comprehensive Integrative Medicine presents this **Lifetime Achievement Award** to Dr. Friedrich R Douwes for his contributions to the advancement of the art and science of medicine, specifically as it relates to Integrative Oncology.

Dr. Douwes studied medicine in Switzerland and Germany, receiving his Board Certification in Internal Medicine in 1975. He actively pursues cancer research and for many years he has been the first Chairman of the charitable organization, Friends of integrated cancer therapy. Dr. Douwes is the President of the German Society for Oncology (DGO) and the founding member of the German Society for GfBK and hyperthermia (DGHT). He is the author of numerous scientific papers. As a renowned lecturer, he has spoken around the world about his passion for healing the sick.

Early in his medical career he became disenchanted with the results he saw from conventional medical practices and decided to find a better way leading him to develop his integrative holistic cancer therapy concept. Over the years he has promoted many unique, effective and innovative integrative treatments for tens of thousands of patients at Clinik St. Georg.

Fredrich, the failing health of your Mother led you to pursue a different path, a challenging path that was not well traveled. You have been in the vanguard of those who believed there was a better way to help a person heal than the conventional path supported by the established medical complex. Risking scorn and your reputation, you forged a path to wellness not conceived before. Your compassion for others and deep felt need to help others is foundational to your pursuit of healing for the world. For those you have graciously helped in the past and for those in the future who will be touched by the advances in medicine that you championed, we salute you on a life well lived in the service of others.

William E. Gonsceaux
CEO of the Academy

W. Lee Cowden, MD
Chairman of Scientific Advisory Board of the Academy

Fig. 3 Lifetime Achievement Award

The public is well aware of the health epidemics of obesity, diabetes, cardiovascular disease, stroke heart attack, and cancer, but as soon as somebody faces chronic Lyme disease, they become aware of another epidemic of our time for which conventional medicine has no popper answer. Today Lyme disease is the number one vector-borne infectious disease in northern Europe, North America and Australia.

I was trained as an internist, hematologist and oncologist, and also received training in natural medicine at the University of Göttingen Germany with a wide diagnostic perspective. Here in our clinic we generally look for multifactorial causes of an illness. Therefore, it was not too difficult for us to find a integrative approach for the treatment of chronic LD. To begin with, each person's symptoms need to be considered individually, and then collected and put into likely disease categories to try and find the common denominator. We call this the differential diagnosis. Does the patient live in a tick-endemic area or have they traveled to one where they could have contracted Lymes or coinfections? Does the patient have hormonal problems despite being young in age. Checking FSH, LH, estradiol, progesterone, testosterone, and free-testosterone levels, as well as sex-hormone binding globulin (SHBG) would help rule out a hormonal dysfunction. Is the patient hypo- or hyperthyroid? Is the patient suffering from weight loss, palpitations, tremors, anxiety, diarrhea, or sweats? Has the patient experienced any recent trauma that might be triggering an anxiety disorder? By simply listing the most common symptoms and performing a proper evaluation of the patients history, physical and laboratory testing, the answers can be found. Thorough and passionate communication enables us to establish the proper diagnosis. To ensure, that we get to hear the full patient story we have a symptom questionnaire that we use with all of our LD patients. This questionnaire was developed years ago by Dr. Burrascano. (Burrascano questionnaire find at: *www.lymenet.de/BurrD.htm*

Common Lyme Disease symptoms such as cognitive problems, vision problems, difficulty with concentration and memory problems hint at the connection between infection and neurological symptoms.

We also find that many of our patients with chronic Lyme disease and co-infections have been exposed to high levels of heavy metals, such as mercury, lead or aluminum. These toxic metals can cause memory and concentration problems, and can cause the production of elevated levels of free radicals, which induce inflammation. Most physicians do not look for elevated levels of toxic metals in their patients since it is not part of the standard medical screen and laboratory testing. Yet toxic metals are getting into people's bodies from multiple sources. We now find them in drinking water, in the glazing on plates, and in seafood. They are also deposited in the brain and this can affect cognitive processing. We know that an inflammatory process is at work causing the severe memory and concentration problems in these patients. If we include the presence of undiagnosed B12 deficiency and/or undiagnosed hypothyroidism in some patients, we have even more causes for neurological disorders in chronic LD patients. But one of the worst causes for neurological symptoms is the permanent production of neurotoxins and inflammatory cytokines by the Borrelia and as long as they are not eliminated, the chances of cure are close to zero. We have seen patients with signs of early dementia with cognitive deficits getting better in their cognitive functioning after treating them with our "Antibiotic Augmented Thermo-Eradication" (AAT) and by subsequently detoxifying them of fat-soluble toxins with glutathione, chelating agents to remove toxic metals and by identifying methylation cycle deficiencies, hypothyroidism and or adrenal insufficiency.
We cannot simply identify a disease like chronic LD or breast cancer without looking into its multifactorial causes, or we will not solve the problem in the sense of finding the cure. Most patients with chronic diseases come into our hospital with a stack of medical records and a long list of complaints. By carefully reviewing their records and using the Burrascano questionnaire we can obtain a complete picture of their medical history which provides us with a probable differential diagnosis and the most probable direction in which healing will be found. In summary, it is important to evaluate all possible disease associated symptoms like heavy metal burden, mitochondrial dysfunction, functional medicine abnormalities in the biochemistry of the body, certain vitamin and mineral deficiencies, detoxification problems; hormonal abnormalities, such as adrenal dysfunction and growth hormone deficiency, reactive hypoglycemia, Candida overgrowth and food allergies.

I believe that after everything I have mentioned, it is clear that Lyme disease is a complex disease and that such a disease cannot be treated in its chronic stage by antibiotics alone anymore. Why? Because antibiotic treatment is unsuccessful an insufficient in many cases, therefore it is necessary to look for other modalities to destroy these microbes other than in a pure chemical approach. We were lucky to show in the beginning of this century, that heat (hyperthermia) and fever is such an approach. I will explain our protocol for the "Antibiotic Augmented Thermo- Eradication" (AAT) now in more detail.

"Antibiotic Augmented Thermo-Eradication" (AAT) of chronic Lyme disease (LD) is the promising alternative.

As I mentioned earlier, in stage I/II, Lyme disease is successfully treatable with antibiotics. In the chronic stage III, antibiotic treatment fails and should not be used over a long period of time, because the side effects of long term antibiotic treatment are very negative and add negatively into the already negative course of the disease. Therefore, we decided 15 years ago to try other modalities to eradicate the borrelia. Borrelia is a spirochaete and related very closely to treponema pallidum, the bacteria which causes syphilis. In 1917, spirochaetal neurosyphilis was treated successfully with "malario-therapy" in combination with salvarsan or bismuth.

Malario-therapy is a special fever treatment. The patients would get infected with malaria and would then develop severe fever. Since treponema is sensitive to heat, the bacteria gets destroyed by

the fever and dies off and the disease improves. For developing this treatment approach Prof. Dr. Julius Wagner Jauregg received the Nobel Prize in 1927. Until the antibiotic era malaria-therapy was the treatment of choice for syphilis, but is now forgotten since the introduction of antibiotics into medicine.

Malario-therapy for spirochaetal LD has been discussed, but never was tried clinically.

But it is a scientifically proven fact that borrelia are thermolabile and respectively thermosensitive. In cultures, they die off at 41.6°C (106.8°F) after 2 hours. We also know that antibiotics are increasingly activated with increasing temperature. In an in vitro study, Borrelia burgdorferi was cultured at different temperatures, alone and in combination with antibiotics.[4] The data demonstrated that growth of the strains PKo and ATCC 35210 (B31) was impaired at temperatures of 37°C (98.6°F) and inhibited at 39°C (102.2°F) and 40°C (104°F), respectively. Strain ATCC 35211, however, grew well up to 39°C (102.2°F) but did not multiply at 40°C (104°F). A bactericidal effect was seen at 41°C (105.8°F) for the strains B31 and PKo and at 41,6°C (106.8°F) for all strains.[1] The susceptibility of all strains to penicillin and ceftriaxone was increased up to 16-fold by an elevation of temperature from 36°C (96.8°F) to 38°C (100.4°F).

(https://www.cancer.gov/aboutcancer/treatment/types/surgery/hyperthermia-fact-)

These in vitro data suggest that elevated body temperature will be beneficial during antimicrobial treatment of LD. This is particularly important in tissues where high concentrations of antibiotics are difficult to achieve. Furthermore, the antibiotics have a chance to be concentrated also intracellularly. Since we already have experience with whole body hyperthermia for more than 25 years in the treatment of advanced cancer patients, it came natural to us to develop a protocol for Lyme patients. We now use a combination of antibiotics combined with extreme heat treatment in chronic Lyme disease. The protocol which we call "Antibiotic Augmented Thermoeradication" (AAT) has been used now in more than 800 patients successfully and without any major risk. It is a new and promising way to help people with chronic LD get their lives back. The majority of patients treated so far by us were patients who

had their Lyme disease for several years, had several courses of long term antibiotics and all more or less were in a desperate situation with no hope of improvement with conventional treatment. 64% of our patients improved so significantly that they could participate in normal life again, while some of the bedridden and paralyzed patients were able walk again. For many other patient's seizures diminished, brain fog disappeared and pain was resolved. All of this is well documented and testimonials can be found on our website and Facebook page.

Why do we have this excellent positive response?

The explanation is easy and clear. If we bring the body temperature up to 41.6°C (106.8°F) during an extreme whole body hyperthermia and maintain this temperature over 2 hours and combine this procedure with an antibiotic, which is applied intravenously at the highest temperature peak, the destructive effect of the heat on one side and that of the antibiotic on the other side work together in a synergistic way to achieve powerful results. With this

procedure, we create a hostile situation for all Borrelia in the body. We can eradicate all Borrelia wherever they are located in the body: intracellularly, in the brain or in biofilms etc. We call this treatment approach "Antibiotic Augmented Thermo-Eradication" (AAT). The treatment protocol was perfected over the years so that we now have a very high percentage of remarkable improvements and cures (restitutio ad integrum). This thermo-eradication of Lymes is often
associated with the Herxheimer reaction, due to whole body hyperthermia and the simultaneous application of an antibiotic. This treatment causes a massive destruction of all borrelia. Almost all Borrelia spirochetes fall apart at the same time during this procedure and an enormous amount of toxins are spilt into circulation. This clinical situation has to be treated very carefully, but is of no serious problem for us, since the patients are in sedation during whole-body hyperthermia and under intensive care. We have performed more than 15 000 whole body hyperthermia in the last 25 years without any major problem. All arguments that say this procedure is risky are irrelevant as our figures and our experience show. The whole body hyperthermia is carried out in a special unit: the so called Heckel bed (see fig 4).

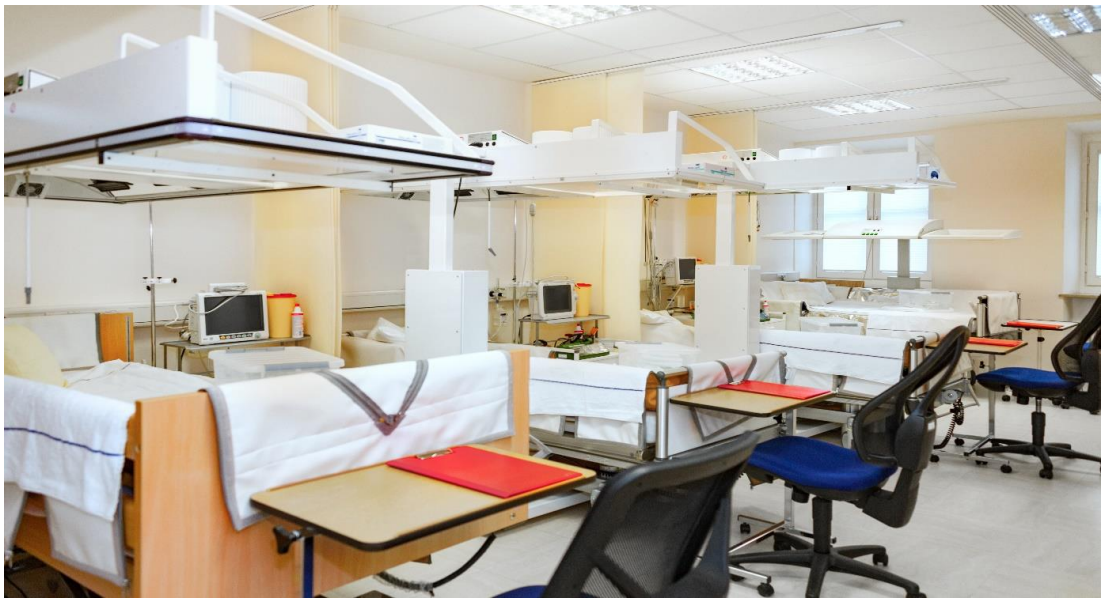


Fig. 4 The treatment room for whole Body Hyperthermia St. Georg Hospital

All these patients were so called lost cases, which means that they had the disease for several years and had several courses of antibiotics which did not help. So there was in conventional medicine no real treatment available for these poor people, except for a symptomatic treatment to ease pain or fatigue etc., but little could be done to help these patients to not progress and worsen every day. Many of them had to leave their jobs and were reduced in their daily social activities. Many patients were also financially exhausted and felt themselves in a desperate and hopeless situation.
After being sure that the patient has Lyme Disease and is in a condition that they can tolerate the whole body hyperthermia, the patients get their first AAT and 7 days later the second. In most cases, we could see an improvement already after the first AAT and even more impressive results after the second. In most cases only two AAT were necessary to achieve a satisfying result. Therefore, most of the patients have to stay only two weeks in our hospital. During and after AAT we start with the repair of affected organs and tissues on one hand and with intensive detoxification on the other hand. Detoxification includes high dose Vitamin C, chelation with EDTA and DMSA, glutathion infusions, hydro-colonics, zeolith and alkalinisation with bicarbonate and procaine. Approximately 60% of our patients had marked improvement

with almost no symptoms left after two weeks of treatment. That means: pain, fibromyalgia, brain fog etc. disappeared, and fatigue vanished. Psychological and neurological symptoms improved, which could be verified by special tests. 25-30 % of our patients had medium improvement: they felt better, but had some symptoms left, which needed additional treatment
during the next 3 to 4 months and only in 10-15 % of patients we had no measurable improvement. We will evaluate our results statistically in the near future and publish our final data including the long term results. Reinfection is as we know so far very rare, because with AAT a specific immune stimulation is initiated.

Summary

In summary AAT is a new treatment approach for chronic and late stage LD with a high response rate and concrete chances for cure. AAT makes it possible for the patient to return back to life and live a normal happy life.

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