

Lyme disease, the tick-borne disease, is curable in most cases

- The BCA helps chronically ill patients suffering from Lyme disease with a holistic approach to therapy – more than 70% of our patients have been treated with success

Many people are not aware of the risks emerging from tick bites and the number of seriously ill patients resulting from tick-borne infectious diseases. Ticks start to be active at 7 °C.

The main risk comes from the “**black-legged**” or “**deer tick**” (*Ixodes ricinus*) which can be found all over Germany and Europe, especially in woodlands. With a bite the tick can transmit the pathogenic borrelia bacteria of the Lyme disease into the human bloodstream. The Dermacentor reticulalis tick also increases in population and spatial dimension and is considerably more aggressive than the deer tick.

The symptoms of Lyme disease are broad and range from strong headaches, fever, inflammation of joints and cardiac muscle to infection of the cardiac muscle and depression. It is the easiest way to diagnose and treat a tick-borne disease directly after the tick bite. However, often the patients did not notice the tick bite, as the symptoms only start after days or weeks in many cases and so are not diagnosed and treated correctly.

The Borreliose-Centrum Augsburg (**BCA**), which was founded in July 2006, specializes in the diagnosis, therapy and treatment of tick-borne diseases and co-infections. This is a very complex field due to the difficulties of identifying Lyme disease and the complexity of the illness pattern (e.g. co-infections). In the Borreliose Centrum Augsburg even chronically-ill Lyme disease patients, who have often given up hope for a life worth living, can be helped with a holistic approach to therapy including a long-term antibiotics, micro nutrient treatment, pain therapy, mental medical attendance and rehabilitation measures for the strengthening of the immune system, etc.

Patient support groups estimate that about 500,000 to 600,000 people in Germany only are already chronically infected with Lyme disease, with yearly increases of > 50,000 (estimate of the Bavarian State Department for Health and Food Safety). If the Lyme disease is not recognized early enough, the infection can cause severe pain (e.g. chronic joint ailments) and loss of power (up to incapacity).

In contrast to the tick-borne Encephalitis (a virus, TBE) it is not yet possible to get vaccinated against Lyme disease.



The deer tick (*Ixodes ricinus*)



The Borreliose Centrum Augsburg, founded in July 2006 specializes in the diagnosis and therapy of tick-borne diseases and co-infections. Here, chronic ill patients, who have suffered a long ordeal, can be helped.



Dr. med. Carsten Nicolaus (Therapy, left) and Dr. med. Armin Schwarzbach (Laboratory medicine, right), the founders and directors of the BCA.

Both of them are active members of ILADS (USA) and the German Borreliose Society e.V.

This is the reason why it is so important to identify the disease early enough. Every sixth to tenth tick bite leads to such a bacteria disease. Every sixth to tenth tick bite leads to such an infection.

How to diagnose Lyme disease – according to the symptoms and ailments in the three stages in which a Lyme disease typically proceeds (time specification after the tick bite):

1. Stage I

(after days up to weeks): „bull’s eye rash“ („Erythema chronicum migrans“, only in 40 - 70% of all cases), Borrelia-lymphozytom, headaches, fever, sweating, feebleness

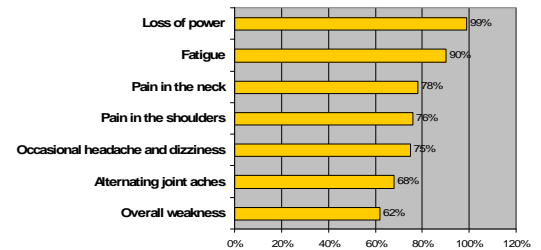
2. Stage II

(after weeks up to months): inflammation of the brain, meninges, spinal cord, all nerves in the body, arthritis, joints and muscle pain, inflammation of the eyes, liver, kidneys, cardiac muscle, pericardium, cardiac arrhythmia

3. Stage III

(after months up to years): Thinning of the skin at the back of the hand („Acrodermatitis chronica atrophicans“), Borrelia-Lymphozytom (ear, nose, scrotum), loss of nerve, clouding of consciousness, parasthesia, inflammation of muscles and joints and turgors, tendinitis, bursitis, inflammation of blood vessels, infection of the cardiac muscle, depression.

**Ailments / Symptoms of
 Chronically Lyme Disease Infection**



During a Lyme disease infection the typical symptoms, like in thrusts appearing neck and shoulder pains, occasional headaches and dizziness, alternating joint aches, increase in intensity, and so become a true nightmare for more and more people.

Symptoms of the Lyme disease occur in thrusts with alternating intensity and appearance in contrast to organic illnesses. Many patients also suffer from slightly higher temperature during those thrusts. Accompanying infections with other bacteria occur increasingly often and lead to a complicated course of the disease. Often a tick bite is not identified early enough or the immediate treatment of the general practitioner is not sufficient. As a result the chronically-ill Lyme disease patients undergo a true martyrdom as they also suffer from the fact that besides their physical and mental illness they do not get a satisfactory diagnosis and no one takes their illness seriously.

If you want to protect yourself from a tick bite there is useful advice available, e.g. on the internet, in the forums of the Lyme disease support groups, in the media and in books (e.g. www.zectect.de, www.b-c-a.de, www.ilads.org, www.borreliose-bund.de). If you are bitten, inform your general practitioner. If there is a suspicion of a borrelia infection, your GP will normally treat you with antibiotics for at least two weeks.

Even chronically-ill patients suffering from Lyme disease can be cured in most cases (> 70%); the Borreliose Centrum Augsburg (BCA) is specialised in this matter.

The BCA was founded by two medical doctors, Dr. med. Carsten Nicolaus and Dr. med. Armin Schwarzbach in 2006. Both of them are specialized in tick-borne diseases and have experience in the diagnosis and treatment for many years: the medical specialist for laboratory medicine Dr. Schwarzbach in all fields of diagnostic and the general practitioner Dr. Nicolaus as a therapist. Today ten experienced physicians form the team of the medical partnership, which is separate but cooperates with the BCA. Our patients come from all over Germany as well as from other European countries, North America, Asia and Australia.

The range of competence and services at the BCA includes (through the cooperation with the legitimately separated Medical Partnership):

- (1) The **diagnosis** of the Lyme disease and possible co-infections. For that, the BCA has its own laboratory complex for special blood tests.
- (2) Treatment of Lyme disease in the **acute stage** (i.e. right after the tick bite)
- (3) The treatment of the Lyme disease in **chronic progression** (especially in stages of severe progression of the disease)
- (4) Treatment of **co-infections**
- (5) **Pain therapy** of Lyme disease in the second stage and during chronic progressions
- (6) **Mental strengthening** and medical **health coaching** in all stages of the illness

The BCA offers the patient a sophisticated and tested diagnosis and therapy concept on 1.700 m²: **diagnosis, laboratory, therapy and rehabilitation all under one roof**. The treatment is offered to outpatients in the form of individual treatments or as a **day medical clinic** (daily and weekly programme, Mo-Fr).

First the BCA tries to provide the patient with certainty about the disease pattern with help of a broad diagnosis. The physicians of the medical partnership perform a detailed anamnesis and special tests (blood analysis) to diagnose Borrelia bacteria and co-infections. They are experienced in balancing Lyme disease with other similar disease patterns (differential diagnosis). In the BCA the diagnosis and therapies are carried out according to international guidelines (ILADS – International Lyme And Associated Diseases Society, USA, www.ilads.org) and the commendations of the German Borreliosis Society (Deutschen Borreliose Gesellschaft e.V., www.borreliose-gesellschaft.de).

Lyme disease infections are curable in most cases, but in general only on a long-term basis. It is possible to perform numerous therapies and rehabilitation measures in the BCA.

Therapy options and stages: (arranged and coordinated with the physicians of the medical partnership and the patient)

Basis: **Treatment with antibiotics** („Augsburg Scheme“)

+ **“accompanying therapies“**, as:

- Module “milieu corrections (incl. deacidification + detox) & change of diet”
- Module “micro nutriment treatment (dietary supplements) & naturopathic treatment“
- module “physio + electro therapies“
- module “pain therapy “
- module “mental coaching “
- package “gain vitality“: rehabilitation and strengthening of the immune system

+ **“Change of life style“** (measures for „self help“ by patients).

Crucial to the therapy is the high dosed **antibiotic treatment** which is given for several weeks under medical surveillance of the attending physician (mostly in form of IV-Therapy). This is to fight the borrelia bacteria in the body.



Antibiotic IV Treatment Room

**Ailments / Symptoms of
 Chronic Lyme Disease
 Infections**

**Borrelia/ Co-pathogens
 (Infection)**

**Acute / chronic
 Inflammation-processes
 &
 Deacidification**

**Weak immune system
 &
 auto-immune reaction**

Take sufficient time for the
 recovery of your health!

According to our experience the successful treatment of chronically-ill Lyme disease patients demands additional “accompanying therapies“ and a “change of life style“ of the patient.

The BCA was especially designed to enable patients to get these “accompanying therapies“ in addition to a treatment with antibiotics (or even instead) on-site. The range of services mainly consists of the following elements: naturopathic therapies, wide range of physiotherapies, photon and several electro therapies, dietary supplements, balancing (acids/bases, deacidification & detox), nutritional advice, exercise programs, relaxation and energy work (incl. mental coaching).

Such “accompanying therapies“ can be taken as single treatments or as the package weekly program Lyme disease „**Intensive treatment and rehabilitation**“ in a **day medical clinic** for one or more weeks.

Through “supporting therapies“ the following effects can be reached:

- (1) Increased effectiveness of antibiotics and improved borrelia bacteria detection and fighting (even for persisted borrelia in the connective tissue)
- (2) Better tolerability of the antibiotics
- (3) Pain relief (even for chronic pain)
- (4) Lessening of the production of inflammations
- (5) Elimination and recovery of toxic substances and support of organic functions (e.g. liver and kidney)
- (6) Treatment of depression
- (7) Improvement of body physics

The side effects of the antibiotics can be lessened with the help of **oxygen therapies** (according to Ardenne) and special dietary supplements (including probiotics). The BCA developed a special **micro nutriment treatment** (BCA Immune Package – see photo).

Please note: according to patient’s wish and in case of specific indications (e.g. intolerance of antibiotics, etc.), **alternative medicinal therapy** can be offered instead of usual antibiotic treatment including Photon Therapies in combination with naturopathic treatments and other supporting treatments. This can be provided and implemented by the BCA.

Many Lyme disease patients suffer from severe even chronic pain. Therefore the medical partnership in the BCA also focuses on **pain therapy accompanying the treatment**. This can be provided in the form of prescriptions of pain relief medicine or so- called co-analgesics as well as supporting therapies, such as acupuncture, TENS- and Hightone therapy and physiotherapy offered by the therapists team of the BCA GmbH & Co. KG.

Mental medical attendance: Seek confidence and lose your fears: Therapies to overcome an existing depression and to rearrange your mental attitude (physician as a „coach“,

Medical therapies and pharmaceuticals can induce many positive effects.

But: **what about necessary change of life-style?**

Especially for chronically-ill patients it is necessary to change their lifestyle in the long-term in order to strengthen the immune system (mentally/activity/nutrition)!
 The BCA is glad to support/coach you.



“BCA Immune Package“: an especially composed micro nutriment therapy by the BCA for the strengthening of the immune system. Important for the healing process and the intestinal flora.



therapy through dialogue, exchange of experience with other patients, stress relaxation and meditation techniques, techniques of problem solving and self-reorientation and organisation).

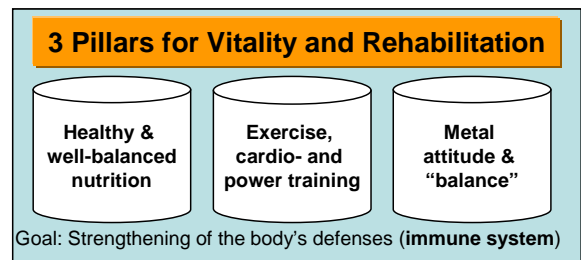
Gain vitality and rebuild the immune system with a specific early rehabilitation in the BCA-Rehab Division with a wide range of physiotherapies. A specific and individual rehabilitation and fitness therapy is started according to the physical ability. With a holistic and individually aligned therapy you cannot only lessen the side effects of the antibiotic treatment, but also activate the body's defences for the reconstruction and the strengthening of the immune system respectively.

“Milieu” therapy with change of diet:

Detox/ Organ-strengthening & alkaline, healthy and well-balanced nutrition (consistent deacidification, enough fluid, bases enriched nutriment, more vegetables and fruit, less milk/animal fats).

Improvement of the **bodily physique:** individual rehabilitation programmes

(Physiotherapies, kinetics, massages, special training units with experienced trainers and therapists).



Additional range of therapies in the complementary medicine sector: **Traditional Chinese Medicine** (TCM), bio resonance therapy, **homoeopathy**, **naturopathy**, Photon therapy, shamanism/ethnomedicine, etc.

Of course, all therapies are supervised by competent specialists of the medical partnership of the BCA (including the medical specialist for laboratory medicine).

Many patients still think that they can only recover with the help of pharmaceuticals and/or single pain therapy treatments. But: The mental reorganisation and change of lifestyle necessary for chronically-ill patients (aim: strengthening of the immune system) is likely to be neglected and needs a lot of persuasion through the attending physician.

We urgently recommend the use of the „**day medical clinic** “ with the weekly program Lyme disease “**Intensive treatment and rehabilitation**“ for 1 up to 3 weeks or even longer. The programme is specially designed for **chronically-ill Lyme disease** patients who would like to fight borrelia bacteria in a holistic approach, to strengthen their immune system and their body's own defences.

Such an intensive treatment enhances your chances of recovery and offers further advantages:

- Get out of your straining every day life and your surroundings. A recovery requires sufficient time for yourself!
- „Monitoring“ by the attending physicians: if necessary modification of the therapy or immediate actions when „Herxheimer reactions“ occur (possible impairment at first)
- Specific pain treatment (not only pharmaceuticals)
- Test, get to know, learn (instructions) and appreciate new therapy possibilities
- Specific instructions for your future way of life, which you learn during your full time medical attendance in the day clinic for several days (mental disposition, physical activities/exercises, nutrition)
- Exchange of experience with other Lyme disease patients and the attending therapists

- People who understand you and have time for you

Our experience shows that due to the holistic approach to therapy the patients are free from all symptoms faster and can be integrated into their private and professional surroundings again. Applying the holistic approach to therapy one does not only lessen the side effects of the antibiotics, but also activate the **body's own defence system** (immune system).

Some patients believe that they can't allow themselves such an intensive treatment financially as the insurance companies cover none or only very little of the therapy costs. In addition, patients think that they cannot spare the time! We do understand your worries – but: we think that your health and your re-gained “joy of life” should be worth it. Our patients want to be symptom free after a predictable amount of time or live a life with only few restrictions due to the Lyme disease infection.

The diagnosis and therapy of tick-borne diseases is cost-intensive and time-consuming due to the complexity of the illness pattern and the difficulties in diagnosing the *Borrelia* bacteria and the various treatment possibilities (from traditional medicine to TCM, homoeopathy and naturopathy). This particularly applies to the treatment of chronically-ill patients. Public health insurance companies in Germany are willing to only cover the costs for laboratory and therapy services in connection with Lyme disease to a very limited extend. Since 2007 even the important laboratory test „LTT *Borrelia*” is not covered by the insurance any longer.

Every patient in the BCA should be granted sufficient time by the physicians so that the right therapies can be conducted. Medical institutions like the BCA can therefore only bill the patients on the basis of a privately insured patient. Part of the services is covered by the insurance, particularly by private insurances. Today, some insurance companies offer additional insurances for tick-borne illnesses. For your information, the BCA is working on a trust to partly pay for the therapy costs for patients who are in need of such a treatment but cannot afford it. This is still under construction and will be in collaboration with the ZecTect Society (www.zectect.de).

In the discussion about the costs of medical treatment of Lyme disease, the “opportunity costs” for the patients are often left out of the calculation. A complex and successful treatment usually result in a fast re-establishment of the “working capacity” and a normal resilience in “every day life“. Health is a precious commodity – many people only realize that when they are seriously ill.

Visit one of the presentations about “Lyme disease – holistic and successful treatment”, “Importance and Strengthening of the Immune System for the Recovery Process” and/or use the BCA offer for the **Intensive Treatment in the Day Medical Clinic** (including individual instructions).

Note again:

The physicians of the medical partnership in the Borreliose Centrum Augsburg (BCA) focus on a systematic antibiotic treatment over the course of weeks or months in terms of chronic Lyme disease and support the holistic therapy approach.

In spite of the impressive patient and therapy successes, the BCA as well as the 120 physicians participating in the German Borreliosis Society (Deutsche Borreliose-Gesellschaft e.V.) are still publicly attacked by a number of physicians; direct attacks come especially from the field of Neurology and Rheumatology.

In the German discussion about the disease pattern of chronic Lyme disease many physician (unfortunately) still believe that:

- (1) the disease pattern of chronic Lyme disease does not exist (Some even argue that it is the patient's "imagination")
- (2) a long-term antibiotics is not effective and so not needed in terms of chronic Lyme disease or the "Post-Lyme-Syndrome"
- (3) there is no scientific research which would justify the medical work of the Borreliose Centrum Augsburg as well as the commendations of the German Borreliosis Society (Deutsche Borreliose-Gesellschaft e.V.)

The Borreliose Centrum Augsburg is trying to work on an educational basis as well to lessen and prevent these statements.

With the contribution "Effectiveness of the Long-term Antibiosis of chronic Lyme disease" the BCA puts itself in the centre of the discussion about the need and justification of the long-term antibiotics. This is especially the case with many general practitioners, who still have a negative impression of this treatment.

Unfortunately, the clinical researches of the last years which have proven successfully are still largely unknown in the German speaking countries.

For this purpose, the results of the 2003 research study with 239 Lyme disease patients conducted by the well-known Prof. Dr. Sam T. Donta, MD, Prof. of Medicine, Divisions of Infectious Disease and BioMolecular Medicine Director, Lyme Disease Unit Boston University Medical Center in Boston is referred to in the contribution mentioned above.

This study underpins the justification of the BCA to treat patients with long-term antibiotics and that chronic Lyme disease is in deed a treatable and often curable disease pattern.


We hope that colleagues in the medical profession in the German speaking countries and elsewhere will start to recognize Lyme disease and the long-term antibiotic treatment as such, and that individual health insurance companies start to change their attitude and stop their critique in terms of the BCA. This article can be downloaded online under www.b-c-a.de.



www.ilads.org



www.borreliose-gesellschaft.de

 <p>BORRELIOSE CENTRUM AUGSBURG Centrum für Zecken-Übertragene Erkrankungen</p> <p>Center for tick-borne diseases and co-infections in Augsburg</p>				
<p>Diagnosis + Therapy</p> <p>„Medical Partnership“ * - 10 attending physicians - for all medical services</p>	<p>Accompanying Therapies</p> <p>incl. intensive treatment, full time medical attendance</p>	<p>specialized Laboratory</p> <p>for tick-borne diseases and co-infections</p>	<p>Fitness</p> <p>incl. rehabilitation and nutrition services</p>	<p>Shop</p> <p>for nutritional & naturopathic products and vital prevention</p>
<p>Dr. med. C. Nicolaus, general practitioner, & Dr. med. A. Schwarzbach, laboratory medicine, medical partnership for tick-borne diseases *</p>		<p>B-C-A Borreliose Centrum Augsburg Betriebs GmbH & Co. KG (www.B-C-A.de)</p> <p>* Cooperation with and tenant in BCA (www.aerzte-borreliose-augsburg.de)</p>		

Note Range of Services:

- All **medical services** (diagnosis, therapies, therapy plans and medical therapy monitoring) are provided by the attending physicians of the „**Medical Partnership**“ as cooperating, but organizationally independent and separated legal entity and will be billed to the patient on a **private medical basis** (according to the Medical Association's professional code of conduct in Bavaria).
- All **further services** (supporting therapies, weekly program "intensive treatment and rehabilitation", laboratory services, dietary supplements, rehabilitation and fitness, other services, etc.) are offered by the B-C-A Borreliose Centrum Augsburg Betriebs GmbH & Co. KG under medical direction and are provided and billed separately by a legal entity.