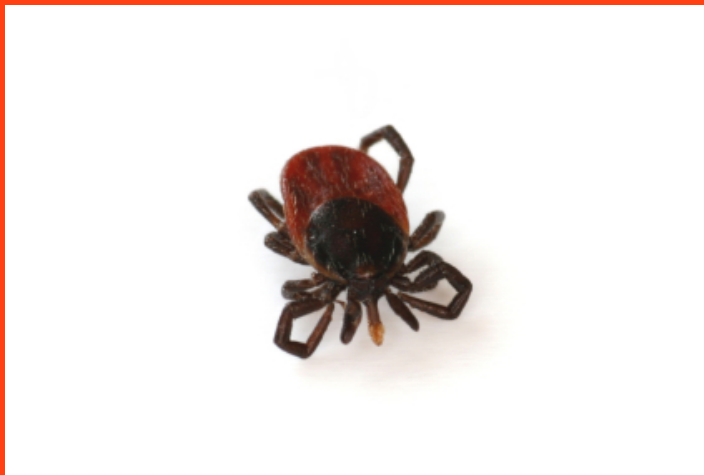


Lyme Disease

Mystery Revealed

What To Do If You Suspect
You Have It



WWW.DOCTORKALITENKO.COM

Lyme disease

Do you feel like something is going disastrously wrong with your body and nobody knows what the hell you are going through? You may be suffering from Lyme disease which is caused by *Borrelia Burgdorferi* and transmitted by ticks. One tick bite can be the reason of the disaster. But you may hardly notice it or even be unaware of tick bite because of its small size.

How long do you think it takes to recognize a new disease? 2 years? 10 years?

It took them 3 years to discover HIV disease; first observed in 1980 and recognized in 1983. So on average no less than 5 years sounds reasonable. Take a wild guess, how many years did it take for modern medical science to discover Lyme?

It was first medically determined as an illness by Reverend Dr. John Walker in 1764. It was 1982, when they found the bug itself -- *Borrelia Burgdorferi*. And only then they confirmed, that it comes from the tick saliva. It took them 218 years to figure out what was going on. And they had modern equipment and resources.

How did it happen, that the HIV virus 120 nanometers in size was discovered 72 times faster, that the Lyme disease spirochete, which is 12,000 times bigger than the HIV virus -- 10 micrometers in size?

If you look at it under the microscope, you will see snakes. The causative agent of Lyme disease *Borrelia Burgdorferi* looks like a snake, as well as syphilis. Somehow it was very difficult to identify those microorganisms that look like snakes.

Even though a lot of famous people, like Guy de Maupassant, Ivan the Terrible, Edouard Monet, Al Capone, Hitler, Mussolini, Cortez, Scott Joplin, Lord Randolph Churchill etc. were suffering from syphilis, it took them 419 years to find out what was going on. First time syphilis was described was in 1494: it was an outbreak among French troops, besieging Naples. It was 1913, when the cause of syphilis, *Treponema Pallidum*, was discovered. I was wondering why so many famous people were infected with syphilis. Were they promiscuous or were they getting inspiration from passion?



So what is common between Lyme disease and Syphilis, except that both of them are caused by snake-like bugs? Why is it so difficult to deal with them? Because both of them are great imitators (1).

Do you think, if it is so difficult for scientists to identify Lyme, it is easy in the regular doctor's office? No, if you are not looking for it. However, if you are suspecting it then yes, it is easy.

Snakes are dangerous, sure. But if you know about the danger then you can protect yourself. If you see a snake approaching, you can run away or kill it. If you are bitten by it, you can always get antiserum and eventually get well. But this is not the case when you deal with Lyme. It is poppy seed sized innocent looking tick, that bites you. Often you don't even know about it -- not like snakes! The danger is not only because the tick is so small. It makes your skin numb so that you do not feel the bite. That is how smart it is. In fact, it is also a victim of the main problem -- *Borrelia Burgdorferi*. It is actually an pandemic among ticks themselves: about 50% of them are infected. So if you are bitten by a tick, you have 50% chances, that is was infected. The scary thing is: besides Lyme you can get other serious illnesses from it like Babesiosis and Human Granulocytic Anaplasmosis.

Have you ever seen a bull's eye? That is how Lyme starts. First thing you might see what is called and described as a "bull's eye" lesion: the red ring with dark red sometimes indurated center inside at the tick bite site. Unfortunately it often goes unnoticed. Or you may never have rash.

Soon after initial invasion, Lyme disease starts to spread. It goes into the skin, causing rashes, muscles, tendons, joints, that causes pains. Also it goes into the heart and nervous system including brain. The result is devastating: you may experience myriad of disabling symptoms from dizziness, fatigue, depression, fibromyalgia, insomnia and palpitations to frank psychosis, heart block and paralysis.

Is there any remedy for this horrible disease?

With the help of modern western medicine and with all its antibiotics there should be a remedy. And medical researchers came up with antibiotic regimens, that should kill the bug right away. It was the perfect time for them to declare victory. What they did not know was: Lyme disease would arise so many controversies and debates that even politicians would get involved (2). This almost never happened in medicine before (3).

So what seemed to be the problem?

If you buy a shirt or pants and you realize that it does not fit what do you do? You get another one or a full refund. Same thing happened with Lyme patients. Up to one third of Lyme patients were not getting better despite treatment (4). So they went to their doctors, saying, that additional treatment may be necessary. But antibiotics are expensive. So medical researches did 4 controlled double blind studies. Two of them showed benefits of long treatment (5), another two did not (6). So what did the official medicine do?

October 2007. The most respected US medical journal "New England Journal of Medicine" (NEJM) publishes the review (7), dedicated to "Chronic Lyme disease". Conclusion:

not scientifically justified, no need for a long antibiotic treatment. But in 1999 doctors lead by Jarno Oksi, from Turku University, Department of Medical Microbiology, Turku, Finland, decided to really check what is going on and that is what they found: "We conclude that the treatment of Lyme Borreliosis with appropriate antibiotics for even more than 3 months may not always eradicate the spirochete (*Borrelia Burgdorferi* -- SK) " (8). May be the reviewers from NEJM did not read this article? Or may be they did not think it was significant enough to change their minds?

Unfortunately that was not all.

Do you remember all your mosquito bites and pimples last summer? Of course not. 50% of patients could not remember a tick bite. Remember: it is like a poppy seed. About 50% of patients do not have typical bullseye rash or do not remember it. Therefore they were presenting with nonspecific symptoms, not suggestive of Lyme.



Sounds very simple: if you do not know what it is -- get the blood test done! CDC recommends to do antibody detecting test called ELISA first, and then if it is positive, proceed with another antibody detecting immunologic test, called Western blot. What if the patient cannot make antibody? Or the genetic material is different from the local type, used to make the test? (9) May be just the sensitivity of the tests is low? (10)

What this means is: they may be testing you for Lyme, specific for your region, but you might get it somewhere else, which is different from they are testing for.

Think about it: if you have enough antibody to defend yourself, that can be detected, would you be sick? Much less likely, because your body is fighting. But what if your body could not defend itself? Cannot make antibodies to attack the bug? Or you produce too little? Then you get really sick, because you do not have a weapon to protect yourself. And the Lyme tests will be negative, so they cannot even officially diagnose you with Lyme. It is called seronegative Lyme disease. That is when you are really in trouble, because you are sick, but you tests are negative or equivocal (11). It is like being at gunpoint in front of the attacker. I wonder, how George W. Bush -- the president of the United States -- was treated, when he was diagnosed with what appeared to be Lyme in 2006? (12). Was he getting 21 days of antibiotics, or for months? This is probably classified and will remain the mystery.

But why so many fights? Why they even had to make special laws in Connecticut (13) and Rhode Island (14) to protect doctors, who were doing what they believed was right for their patients -- treating them according to their clinical judgement? Why nobody is so excited about how many

days you may be treated for urinary tract infection, but everybody goes crazy about treatment of Lyme?

September 2006. North Carolina Court House. Unusual civil lawsuit was filed here. It was not a class action lawsuit against a large corporation we used to read about in the newspapers every day. It was just the opposite. A large health care insurance company Blue Cross and Blue Shield or North Carolina was suing a prominent doctor Joseph Jamsek, specializing in Lyme and HIV treatments, for a huge sum of 100 million dollars for insurance fraud. Apparently this doctor did not have a lot of money, because he had to go bankrupt. Not only because he could not pay 100 million dollars. Because he could not even afford to fight with the health insurance company. But what did he do? Did he steal money from insurance? No. Did he steal money from patients? No. Did he receive kickbacks? Not that they know of.

What he did was: he was treating his Lyme patients according to what he thought was right for them. He was treating his Lyme patients according to International Lyme And Associated Diseases Society (ILADS) recommendations. What the insurance company wanted him to do was to treat Lyme patients as per Infections Disease Society of America (IDSA) recommendations.

But what is the difference between two of them? Both are non for profit, both of them are made by doctors, both of them are not government branches. The difference is: IDSA recommended treatment is much much cheaper, then ILADS recommended. So which one the health insurance company prefer? And who do you think won?

But health insurance companies are not always that lucky.

2006. Connecticut. Attorney General's office. Mr. Richard Blumenthal is facing reelection in November 2006. This is the same Attorney General Richard Blumenthal, who was presenting himself as a Vietnam veteran, that did not match his military records as per New York Times (15). He is very well aware of the patient's rage because of insurances denial to pay for long Lyme treatment. He meets with the Lyme activists. This is not the first time he meets with them. In 1999 he initiated the hearings about insurance coverage for long term treatment for Lyme. At that time patients won. What about now?

Health Insurance companies denied payments for treatments because Infections Disease Society of America (IDSA) does not recommend prolonged treatment for Lyme. These recommendations are written by the IDSA panel of experts. And Attorney General Mr. Blumenthal looks for a motive. And here it is: 5 of the 14 panel members had undisclosed conflict of interests (16). Moreover IDSA had bias appointing the chairman, refused to accept the information about chronic Lyme disease, "blocked appointment of scientists and physicians with divergent views on chronic Lyme", etc.

You do not need more proof.

Despite evidence collected by Mr. Blumenthal, the investigation was closed in 2008 without any charges against IDSA. However, the IDSA promised to revise their recommendations for Lyme disease. And they issued their new recommendations in 2010. Do you think there were any changes? Not at all.

As per IDSA they spent close to 1 million dollars for revising guidelines and legal fees. I wonder where they got such a huge sum from? Who paid for this? Doctors? Somebody else?

But still life became easier for doctors and patients: in 2009 Connecticut and then Rhode Island passed the laws, protecting doctors from sanctions for long Lyme disease treatment (17).



What is the reason of such serious disagreement between to groups of Lyme experts: IDSA and ILADS? To me it is unlikely, that all the experts had bias. Because they became doctors to help people. This is the doctor's nature. Or may be the difference in opinions was used by health insurance companies to make more profit?

There is nothing wrong with the difference in opinions. This is human nature. It is like the difference between religion and science. Religion and Science have two very different views on things but the differences between the two of them does not mean, that either one of them is wrong.

Therefore IDSA has reasonable guide lines, based on the very strict Lyme diagnostic criteria. But ILADS makes a very strong point, that Lyme cannot be diagnosed by official criteria.

What if there is something else going on? May be it is not only Lyme? Or maybe we have a real problem with finding Lyme spirochete itself?

Look what the government is saying: according to CDC "During the 15-year study period, the number of cases reported increased 101%, from 9,908 cases in 1992 to 19,931 cases in 2006" (18). And they are not trying to find out why?

Now forget about doctors and science, insurance companies and politicians. Use your common sense. How is it that in 15 years it increased 2 times? Did they start a food stamp program for ticks so that they could bite so many more people? Or may be they opened subsidized housing in the woods so that hungry ticks are now able to bite every person available? Not that I know of. It should be the opposite trend, because of awareness about Lyme. More people are using repellents, more people are avoiding woods, the government is deploying various measures. So is this silent epidemic a mystery?

Obviously there are no more ticks. Obviously there are probably less tick bites. The only plausible explanation of this rapid growth of Lyme is improving diagnosis. But if the growth is so fast, it means that our ability to diagnose it by lab tests are very poor. This is with all modern technology, Internet and supercomputers? Could there be one thing, that can explain Lyme elusive nature?

1684. Delft, Netherlands. All neighbors, customers and friends of the smart child of basket maker Antonie van Leeuwenhoek are amazed, how hardworking he is. Antonie is working days and nights to produce his invention -- lenses. But what his friends, neighbors and customers did not know was: he was just pretending to be working. Because the secret technology of making lenses was very easy: he just put glass rods into the flame, pulled it apart, then put the small whiskers into the flame again. That is how he created the small glass ball, which was in fact a high quality lens. He was afraid, that if everybody realized how easy it was, he would lose his business. But why did he make lenses?

To see what has never seen before -- the bacteria kingdom. What he saw was so fascinating that he wrote to the Royal Society in London: "The number of these animicules in the scurf of a man's teeth are so many that I believe they exceed the number of men in a kingdom." (19). What he was looking at was dental plaque. What he did not realize was: he was the first man on earth who was looking at the biofilm. Do you brush your teeth? In fact what you are doing is -- you remove biofilm from your teeth. What is this innocently looking monster?

Biofilm is where dangerous bacteria are hiding. They create a labyrinth of polymeric fibers on an appropriate surface with small holes and pockets, that are bacteria citadels. That is where they hide and cannot be detected by lab tests. That is where they cannot be hit by antibiotics. That is where they are waiting for better times to go out and hit again. That is why biofilms are so dangerous. Maybe they are rare and not significant in the everyday practice? In fact opposite is true.

Biofilms take place in 80% of all diseases (20). And Lyme is one of them. Lyme is not measles, not common cold, that is designed to hit fast and to spread to another person. Lyme is designed to live long time in the host -- ticks, deers and may be humans. That is why it is so elusive. This is because Lyme is making biofilm and hiding in it! That is why sometimes it is not being identified in the blood tests! That is why it often does not respond to antibiotics! Want proof?

Dr. Eva Sapi, a professor of cellular and molecular biology at the University of New Haven, is doing cancer research. But suddenly she starts suffering from brain swelling. Clinically she had Lyme but her tests were negative. So she had to start her own research. What she along with Dr. McDonald found was: ticks bear other pathogens like mycoplasma along with Lyme spirochete. And they can be hiding in the Biofilms! (21). I wonder why the revised 2010 year recommendations for Lyme disease management by Infections Disease Society of America (IDSA) do not say a word about such an important discovery. It was their expert's job to take this into consideration. Or may be they did not wanted to? What was the reason behind this?

Looks like the experts of IDSA did not appreciate Dr. Sapi and Dr. McDonald's work. But the ordinary people did: they gave Oscar nomination for the movie "Under your skin" dedicated to Dr. Sapi and Dr. McDonald's work. They do deserve to be praised, because the fact, that Lyme is hiding in the biofilm can explain the treatment failures. So maybe we should break the biofilm before treating Lyme?

Bottom line is simple:

1. If you were bitten by a tick and experienced rash -- come for evaluation, because the sooner you get treatment - the higher your chances for recovery.
2. Even if you were not bitten by a tick, but had symptoms, suggestive of Lyme disease like rash, you may benefit from evaluation for Lyme anyway, because often tick bites are unrecognized.
3. Get better with Lyme treatment by taking antibiotics that hit the Lyme bugs in their hidden places, where they are hiding!

If you have any questions, concerns or would like to arrange an appointment, please call Dr. Kalitenko at (516) 467 0253

Disclaimer:

Doctor Kalitenko is Board Certified in Anti-Aging and Regenerative, Holistic and Integrative Medicine. His Long Island office is located at 17 Maple drive, Great Neck, Nassau County, Long Island, NY. For more information, call the office Long Island office at (516) 467 0253 or the Brooklyn location at (718) 382 9200. He also serves the New York area with offices in Great Neck, Long Island, and Brooklyn. Dr. Kalitenko works with women and men from all over the tri-state area.

For more information about his services and to get free proven tips on how to lose weight and how to look and feel 10 years younger visit www.doctorkalitenko.com.

For medical news, read his anti-aging blog at <http://www.doctorkalitenko.com/blog>, or sign up for valuable e-seminars that can help you achieve your anti-aging and health goals in the most natural way.

Please note that anti aging and holistic medicine is not recognized by the American Board of Medical Specialties. Opinions here do not reflect the opinion of American Boards of Medical Professions, FDA or other government agencies. This article is not intended to medically advise individuals and should only be used for informational purposes. In addition, this article is not intended to make any health statements. Please consult your primary physician before making any medical decisions.

References:

- (1) Pachner AR (1989). "Neurologic manifestations of Lyme disease, the new "great imitator"". Rev. Infect. Dis. 11 Suppl 6: S1482–1486. PMID 2682960.
- (2) <http://www.medscape.com/viewarticle/704166>
- (3) "In the Lymelight: Law and Clinical Practice Guidelines"
- (4) Cairns V, Godwin J (2005). "Post-Lyme borreliosis syndrome: a meta-analysis of reported symptoms". Int J Epidemiol 34 (6): 1340–1345. doi:10.1093/ije/dyi129. PMID 16040645. Halperin, JJ (2008). "Prolonged Lyme disease treatment: Enough is enough". Neurology 70 (13): 986–7. doi:10.1212/01.WNL.0000291407.40667.69. PMID 17928578
- (5) Krupp LB, Hyman LG, Grimson R, et al. (24 June 2003). "Study and treatment of post Lyme disease (STOP-LD): a randomized double masked clinical trial". Neurology 60 (12): 1923–30. PMID 12821734. Fallon BA, Keilp JG, Corbera KM, Petkova E, Britton CB, Dwyer E, Slavov I, Cheng J, Dobkin J, Nelson DR, Sackeim HA (March 2008). "A randomized, placebo-controlled trial of repeated IV antibiotic therapy for Lyme encephalopathy". Neurology 70 (13): 992–1003. doi: 10.1212/01.WNL.0000284604.61160.2d. PMID 17928580.
- (6) Klemmner MS, Hu LT, Evans J, et al. (July 2001). "Two controlled trials of antibiotic treatment in patients with persistent symptoms and a history of Lyme disease". N. Engl. J. Med. 345 (2): 85–92. doi:10.1056/NEJM200107123450202. PMID 11450676. Kaplan RF, Trevino RP, Johnson GM, et al. (June 2003). "Cognitive function in post-treatment Lyme disease: do additional antibiotics help?". Neurology 60 (12): 1916–22. PMID 12821733.
- (7) NEJM article Feder HM, Johnson BJ, O'Connell S, et al. (October 2007). "A critical appraisal of "chronic Lyme disease"". N. Engl. J. Med. 357 (14): 1422–30. doi:10.1056/NEJMra072023. PMID 17914043. <http://content.nejm.org/cgi/content/full/357/14/1422>.
- (8) <http://informahealthcare.com/doi/abs/10.3109/07853899909115982>
- (9) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2773679/?tool=pmcentrez>
- (10) Petrovic M, Vogelaers D, Van Renterghem L, Carton D, De Reuck J, Afschrift M. Lyme borreliosis – a review of the late stages and treatment of four cases. Acta Clin. Belg. 53, 178–183 (1998). Tilton RC, Sand MN, Manak M. The Western immunoblot for Lyme disease: determination of sensitivity, specificity and interpretive criteria with use of commercially available performance panels. Clin. Infect. Dis. 25(Suppl. 1), S31–S34 (1997).
- (11) Cameron DJ. Monitoring Lyme disease in the community – First surveillance database sentinel health site. Proceedings of the 12th Annual International Scientific Conference on Lyme Disease and Other Spirochetal and Tick-Borne Disorders (1999). Klemmner MS, Hu LT, Evans J et al. Two controlled trials of antibiotic treatment in patients with persistent symptoms and a history of Lyme disease. N. Engl. J. Med. 345, 85–92 (2001).
- (12) <http://www.washingtonpost.com/wp-dyn/content/article/2007/08/08/AR2007080802268.html>
- (13) http://www.cga.ct.gov/asp/cgabilstatus/cgabilstatus.asp?selBillType=Bill&bill_num=6200&which_year=2009&SUBMIT1_x=0&SUBMIT1_y=0&SUBMIT1=Normal
- (14) <http://www.health.state.ri.us/disease/communicable/lyme/law.php>
- (15) <http://www.nytimes.com/2010/05/18/nyregion/18blumenthal.html?scp=2&sq=richard%20Blumenthal&st=cse>
- (16) State of Connecticut Attorney General's Office (2008-05-01). "Attorney General's Investigation Reveals Flawed Lyme Disease Guideline Process, IDSA Agrees To Reassess Guidelines, Install Independent Arbiter". Press release. Retrieved 2008-06-24.
- (17) http://www.cga.ct.gov/asp/cgabilstatus/cgabilstatus.asp?selBillType=Bill&bill_num=6200&which_year=2009&SUBMIT1_x=0&SUBMIT1_y=0&SUBMIT1=Normal
- (18) <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5710a1.htm>
- (19) <http://www.biofilm.montana.edu/node/2930>
- (20) <http://grants.nih.gov/grants/guide/pa-files/PA-03-047.html>
- (21) Sapi E, MacDonald, A. Biofilms of Borrelia burgdorferi in Chronic Cutaneous Borreliosis. Am J Clin Pathol 2008; 129:000-000 http://www.newhaven.edu/unhtoday/archive/UNH_09172007/pages/faculty_profile.html