



AFFORDABLE CHIROPRACTIC CLINIC

420 East Armour Road
North Kansas City, Missouri 64116
816-889-9800

LYME DISEASE

“THE GREAT IMITATOR”

- Lyme disease was first reported in the 1880s.
- You may get Lyme disease from deer ticks that hang out in tall grass, or mosquitoes, fleas and mice already infected.
- An adult tick can go 5 years without eating.
- Harvard Medical School estimates the number of these infections at about 200,000 per year.
- Lyme disease will hide in the joint tissue, white brain tissue, eyes, and spinal cord – anywhere there is no blood supply.
- Lyme disease spirochetes affect your immune system; 7 out of 10 Alzheimer’s brain bank tissue samples showed spirochetes (a parasitic or free-living bacteria, many of which are pathogenic to humans and other animals).
- EBV (Epstein Barr) is also found in Chronic Lyme Disease (Epstein-Barr is a virus that lies dormant in the body and can be activated after transplantation or during childhood causing flu-like illness, enlarged lymph nodes and/or general malaise).
- Lyme disease symptoms are often misinterpreted by doctors since they mimic so many other possible infections.



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Figure 1: Male and Female Deer Ticks



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What to look for:



Figure 2: Bulls Eye Rash

- Bulls-eye rash (can be pronounced or mild reddish lesions with no inner ring separation)
- Low grade fever
- Mood swings
- High fever, chills or sweating
- Mental confusion and loss of short term memory
- Disturbed sleep
- Fatigue, tiredness, poor stamina
- General flu-like symptoms
- Mild to moderate muscle joint pain
- Severe migraines, neck stiffness
- Bell's Palsy

What you can do to avoid Lyme disease:

- Avoid tall grass
- Use dog collar around pant legs



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CD-57 Test-immune system shot “very hard to find”

There is a way to test for the activity level of Lyme disease called The CD-57 Striker Panel Test. According to [Health Centers of America](#), our ability to measure CD-57 counts represents a breakthrough in Chronic Lyme Disease treatment. It can be used to help determine how active the infection is, how well the treatment is working, and whether, after treatment ends, a relapse is likely to occur!

This is how it works: Chronic Lyme infections are known to suppress the immune system. The Lyme spirochete can affect all major cell types of the immune system, but it most clearly can impact a specific subset of the natural killer cells. This is called the CD-57 subset. Just as in HIV infection, which suppresses T-cell counts, Lyme suppresses Natural killer cell count such as CD-57. As in HIV infection, where abnormally low T-cell counts are routinely used as a marker of how active the infection is, in Lyme we can use the CD-57 count to indicate how active the Lyme infection is. When Lyme is active, the CD-57 count is suppressed. At LabCorp, the expected range for the CD-57 count is above 60. However, in the chronic Lyme patient, CD-57 counts are usually well below 60 and may be at risk with levels of 60-100.

This test can be run at the start of therapy, then every several months to document the effectiveness of treatment. One hopes to see a stable number or a rising trend over time. When antibiotic therapy is finally at an end, if the CD-57 count is not above 60, then a Lyme relapse is more likely to occur.

Test interpretation: Low CD-57 occurs in chronic Lyme or when the disease has been active for over 1 year. A review of the affects of other infections, only Lyme spirochetes lowers the CD-57. Following is the criteria established by research.

Test interpretation: Low CD-57 occurs in Chronic Lyme or when the disease has been active for over 1 year. The count reflects the degree of infection. It is not a diagnostic test but is used as a marker for Lyme being active.



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In tests done by LabCorp, a CD-57 count of ...

>200 is normal

< 20 indicates severe illness

= 0-60 is seen in chronic Lyme disease

> 60 Lyme activity indicates improvement

The CDC reports Lyme Disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans by the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks; laboratory testing is helpful in the later stages of disease. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics. Steps to prevent Lyme disease include using insect repellent, removing ticks promptly, landscaping, and integrated pest management. The ticks that transmit Lyme disease can occasionally transmit other tick-borne diseases as well.