North Eastern Tree Care
Healthy Solutions For A Healthy Planet

Lyme Disease: The Perfect Storm Is Headed Our Way

By Leo Galland, M.D. 04/18/2012 8:06 am

Blood-sucking ticks coming to a field and forest near you.
That may sound like the latest horror film, but unfortunately it is a reality due to a surge in ticks that spread Lyme disease this spring.

Fortunately, the media interest in Lyme disease appears to be growing with the threat. At the start of the month I was interviewed on Martha Stewart Living Radio about Lyme disease.

The Perfect Storm for Lyme Disease
A perfect storm happens when two conditions converge to amplify each other's effects. Two conditions are creating what may become the perfect storm for transmission of Lyme disease this spring:

1. An unusually warm winter, which left deer ticks alive, hungry and looking for a meal.
2. A dramatic flip-flop in the acorn cycle: A large crop of acorns in the fall of 2010 and a very small crop in 2011 in the East. This means fewer mice for the ticks to feed upon, as I explain below.

These two conditions mean tons of deer ticks that are hungry and lacking their typical food supply. You could be their next meal.

Ticks Transmit Lyme and Other Diseases
The bacteria that cause Lyme disease, Borrelia burgdorferi, are transmitted to humans by the bite of a deer tick (Ixodes dammini).

Deer ticks live for two years and in their lifetimes take only three blood meals: the first as newborn larvae, the second a year later as immature nymphs and the third a season later as adults.

Mice and Other Rodents Carry Ticks Too
If you don't see any deer and think the coast is clear, think again.

Deer ticks live in vegetation and hitch rides on animals on which they feed, not only deer, but mice and other rodents.

White-footed mice may be the most efficient carriers of deer ticks for human infection. White-footed mice thrive in vacant lots and small wooded parcels near homes because their natural predators cannot survive in those environments.

More: Lyme disease -- Risk of Lyme Disease Expands
The mice feed on acorns and store them for winter. The fall of 2010 brought a bumper crop of acorns, which led to a surge in the mouse population and created abundant homes for tick larvae last spring.

In the fall of 2011 the acorn crop was the smallest it's been in two decades, decimating the mouse population over the winter and leaving a huge number of displaced nymphs that are looking for warm-blooded hosts, like humans. Ixodes nymphs are especially good at transmitting Borrelia to humans.

Read Spring Surge in Lyme Disease
The Challenge of Preventing Lyme Disease
One of the key challenges with Lyme is getting people to change their behavior. Prevention starts with awareness. THINK LYME. You're as likely, maybe even more likely, to get bit by a deer tick in your backyard as hiking in a forest.

Steps to Prevent Lyme Disease

- Do daily tick checks. Deer ticks are tiny, about the size of poppy seeds, and easy to miss.
- You may need to spray your clothes and your yard with permethrins or other pesticides, but chemical tick control is never enough.
- Remove debris and clutter on your property to discourage rodent populations. Keep grass and weeds cut short in areas you use for recreation.
- Strong sunlight kills deer ticks by drying them out. Since ticks cannot hop or fly they find you by dropping onto you from vegetation, after sensing your presence. If pesticides have been sprayed on the upper surface of a plant, the tick will simply hide on the under surface.
- If you find a tick, remove it with small-tipped tweezers, grasping it as close to the skin as possible. Try to get it all, slowly but firmly pulling the tick away from the skin. Save the tick in a sealed plastic bag or a container of alcohol. State health departments and private laboratories can test the tick for the presence of bacteria that cause Lyme disease.
- In many areas the majority of ticks are infected with Borrelia. Talk to your doctor about pre-emptive therapy and check the website Treat the Bite (www.treatthebite.com). Once you have removed the tick, wash your hands and disinfect the tweezers by leaving them in alcohol for several hours.

More: Cure Unknown: Inside the Lyme Epidemic
The Challenge of Diagnosing Lyme Disease
Lyme disease is a great masquerader, which makes getting a proper diagnosis of Lyme a real challenge. Lyme can cause symptoms in multiple organs, including skin, heart, nervous system, joints and muscles and gastrointestinal tract. Involvement of the lungs, eyes or urinary tract has also been reported.

For some people, fatigue or brain fog is the only symptom of Lyme disease. Sometimes the most prominent symptom is a change in mood or personality.

Symptoms may begin days or months after a tick bite. Many victims of Lyme disease are unaware of having had a tick bite. The majority of Lyme patients I've seen never had the classic "bull's eye rash" that can be an early sign of the disease.

Doctors usually use blood tests to make a diagnosis of Lyme disease, but several factors limit their value:

- These tests rely on antibodies, proteins made by your immune system to attack Borrelia. Antibodies may not be measurable for a month after the tick bite.
- Early treatment with antibiotics may prevent antibody formation without curing Lyme disease.
- People who are immune-suppressed may not make antibodies.
- The results of antibody testing at different labs can vary greatly.
- Deer ticks may carry pathogenic microbes other than Borrelia. These other infections will not be detected by a test for Lyme disease but may produce distinct illnesses like babesiosis, ehrlichiosis or bartonellosis that overlap symptomatically with Lyme disease.

At the present time, the diagnosis of Lyme disease is a clinical diagnosis, not a laboratory diagnosis. It requires a clinician with Lyme experience.

The Challenge of Treating Lyme Disease

There is a great deal of controversy about optimal treatment for Lyme disease. The Infectious Disease Society of America recommends two to three weeks of antibiotics as the treatment for Lyme disease, but more than two dozen studies have documented persistence of illness among patients with Lyme disease after a 2-3 week course of antibiotics.

More on the controversy: Under Our Skin -- Lyme Disease Film

Persisting symptoms are often associated with evidence of persisting infection with Lyme disease. The presence of other tick-borne infections usually impairs the treatment response to Lyme disease.

When it comes to Lyme disease, many people feel that their concerns have not been adequately addressed by the conventional medicine approach. Learn more about what makes Lyme so elusive in Lyme Disease -- Why Lyme is the Mystery Disease.

Now I'd like to hear from you:

Do you have unexplained symptoms?

Have your been tested for Lyme or other tick-borne diseases?

How do you think you may have gotten Lyme disease?

Please let me know your thoughts by posting a comment below.

Best Health,

Leo Galland, M.D.

Leo Galland, MD *is a board-certified internist, author and internationally recognized leader in integrated medicine.*