Lyme Disease

What is Lyme disease?

Lyme disease is an infection caused by a kind of bacteria (germ) called a spirochete (say: "spy-ro-keet"). The disease is carried by deer ticks and western black-legged ticks (found mostly on the Pacific Coast). These ticks can spread the disease to animals and humans through tick bites. These ticks are tiny. They are about the size of a sesame seed.

Lyme disease is most common in rural and suburban areas in the northeastern and midwestern states. Lyme disease is also found in other parts of the United States, as well as in Europe, Asia and Australia.

What are the symptoms of Lyme disease?

The earliest sign of Lyme disease is a rash, which may appear 3 to 30 days after a tick bite. This rash, called erythema migrans (say: "ear-a-theem-a my-granz"), usually starts at the site of the tick bite. It may begin as a small red spot and grow larger. The center may fade, creating a "bull's eye" or ring appearance. Some people with Lyme disease have many red spots. The rash may burn, hurt or itch, or you may not notice it.

Some people with Lyme disease start to feel ill around the time they notice the rash. They may have fever, chills, headaches, stiff neck, fatigue, muscle aches and joint pain. In a few people, early Lyme disease can spread to the heart or the nervous system. If Lyme disease spreads to the heart, the person may feel an irregular or slow heartbeat. Early spread of Lyme disease to the nervous system can cause the face to droop (a condition called Bell's palsy).

What about the later stages of Lyme disease?

If Lyme disease isn't treated, it can spread to other parts of the body. The symptoms of late Lyme disease include arthritis (painful, swollen joints) and nervous system problems. Lyme arthritis often affects only 1 of the large joints, such as the knee. Sometimes it may affect more than 1 joint. The symptoms of the nervous system disorder caused by late Lyme disease may include trouble concentrating, loss of memory, muscle weakness, and tingling and numbness in the arms and legs. However, Lyme disease rarely causes such nervous system problems.

How can my doctor tell if I have Lyme disease?

The best way to find out if you have Lyme disease is to talk to your family doctor about your symptoms. Blood tests aren't always necessary to make the diagnosis and they can often give false results if you have early Lyme disease. People with early Lyme disease who have been sick for less than a month often don't yet have antibodies to the disease, which means they won't have a positive blood test. Also, if a person with early Lyme disease takes antibiotics, he or she may never have a positive Lyme disease test. Some people with early Lyme disease have a positive test that remains positive even after they take medicine for 30 days. Therefore, the test isn't very useful for checking you after treatment.

The blood test is almost always positive in people who have been sick for over 4 weeks and haven't taken antibiotics. People with joint swelling or nervous system disease may need to have special tests. Your doctor may need to take some fluid from the swollen joint or the spine to check for clues to your condition.

How is Lyme disease treated?

Lyme disease is treated with antibiotics. Early Lyme disease responds very well to treatment. In most cases, 30 days of treatment with an antibiotic kills the bacteria. It's important for you to take all the medicine your doctor prescribes to prevent the spread of Lyme disease to your joints, nervous system or heart. If you have problems with the medicine, don't quit taking it. Call your doctor and talk to him or her about your problems.

How can I prevent Lyme disease?

The best way to prevent Lyme disease is to prevent tick bites. Wear light-colored clothing that covers most of your skin when you go into the woods or an area overgrown with grass and bushes. This makes it easier to see and remove ticks on your clothing. Wear a long-sleeved shirt and pants instead of shorts. Tuck your pant legs into your socks for added protection. Remember that ticks are usually found close to the ground, especially in moist, shaded areas.

Use an insect repellent containing DEET or permethrin. Apply DEET sparingly to skin according to directions on the label. Don't apply it to the face and hands of children. Put permethrin only on clothes. If you live in a wooded area, consider applying an acaricide (a chemical that kills ticks) to your yard in the spring. Only use it outside, not inside or on your clothes or body.

After you spend time outdoors, check your skin and your children's skin--body and scalp-carefully for ticks and rashes. Check your pets for ticks, too. You aren't likely to get Lyme disease if the tick has been attached to your skin for less than 48 hours.

What do I do if I find a tick on my skin?

Don't panic. Using a pair of fine-tipped tweezers, grasp the tick body as close to your skin as possible. Pull in a steady upward motion until the tick comes out. Be careful not to squeeze or twist the tick body. If any tick parts remain in the skin, you can leave them alone or carefully remove them the same way you would a splinter. Then apply an antiseptic to the bite area and wash your hands with soap and water. Don't use the old methods of putting petroleum jelly, nail polish, kerosene, gasoline or matches on the tick to try to remove it. These don't work.

After the tick is removed, watch the bite area and the rest of your skin over the next month for a rash. If you get a rash, see your doctor. Be sure to tell your doctor that you were bitten by a tick and when. Only people who get sick and/or get a rash after being bitten by a tick need antibiotics. If you are bitten by a tick and don't get sick or get a rash, you don't need antibiotics.

For more information

For more information about Lyme disease, you may call the Centers for Disease Control and Prevention at 800-311-3435, or visit their Web site at www.cdc.gov.

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