
What is Lyme Disease?

Lyme Disease is a small but growing problem in the UK. It is caused by a germ (bacteria called *Borrelia burghdorferi*) carried by ticks. In the UK there are 15 species that are known to have attached to humans.

Ticks are tiny spider-like creatures which are found in woodland, moorland and other grassy areas. Infected ticks have been collected from the remote Scottish isles to the London parks. Although certain areas are considered to be "hot spots", anywhere that supports a diverse wildlife population, and that has good vegetation cover, will also support a population of ticks (including urban parks and gardens).

Ticks are commonly carried on a deer, but also on sheep, horses or dogs. Not every tick is infected with the Lyme disease germ. It can take several hours (or as long as 2 days) after being bitten before an infected tick will pass on the germ. It is not passed on from person to person.

What are the symptoms?

The disease may first show itself three to thirty two days after the bite as a red spot around the location of the tick's bite. The spot will gradually grow bigger, often with a pale area in the middle. This symptom is called erythema migrans.

Early symptoms can be 'flu-like' with swollen glands near the bite, mild headaches, aching muscles and joints, and tiredness.

If left untreated, the disease may develop over months and even years, when facial muscle weakness, meningitis-like symptoms, heartbeat problems and/or arthritis symptoms may occur.

How is it diagnosed?

If you experience any change in your general health, it is advisable to seek medical attention. The illness can be difficult to diagnose if the patient and doctor are not aware that there has been exposure to infected ticks. This is especially true for people who do not live in rural areas and who may only have been exposed for a brief period during a holiday or even a day trip. Many people get tick bites but remain unaware of them because of the tick's tiny size.

A doctor may take a blood sample to try to confirm Lyme disease. However these can take up to eight weeks to become positive. This means that the patient may have Lyme disease even though the test shows up nothing.

A patient who develops complications may need to be admitted to hospital for specialist tests.

How is it treated?

Swift and proper antibiotic treatment will cause the erythema migrans rash to disappear within two weeks. Even without treatment most cases of erythema migrans will go away without leaving permanent effects. But treatment lowers the risk of later symptoms in the nervous system and joints.

Can it be prevented?

Yes. The ticks cling to ends of vegetation and wave their legs around hoping to latch on to a passing animal or person - so a first defence is to keep skin covered. If a tick attaches itself to clothing, it may crawl around for some time before making contact with the skin.

The following may help:

- ❖ Wear long trousers, tucked into socks if possible, and long-sleeved shirts
- ❖ Wear shoes or boots rather than open-toed sandals
- ❖ Light coloured clothes will help to spot ticks and brush them off
- ❖ Inspect for ticks every few hours and, if possible, at the end of your day's outdoor activity, undress and completely check the body for ticks
- ❖ Make sure that children's skin and clothes are properly checked
- ❖ Insect repellent on clothing and repellent collars for pets may help

How do I remove ticks?

Do not panic, but remove the tick as soon as possible. An infected tick will not usually pass on the infection until it is fully engorged with blood. Unfed they begin the size of a sesame seed growing 100 times in size when engorged.

Many different methods are used to remove ticks. DO NOT use petroleum jelly, any liquid solutions, or freeze / burn the tick, as this will stimulate it to regurgitate its stomach contents, increasing the chance of infection.

The most reliable and safest method is to grasp the tick as close to the skin as possible with specially designed tick removal curved forceps or hook. These can be bought quite cheaply at many chemists, pet stores or vets. Engage the hook by approaching the tick from the side (the body of the tick is flat) until it is held securely. Lift the hook very lightly and TURN IT (screwing or unscrewing). The tick detaches itself after 2-3 rotations.

If these are not available use tweezers or protected fingers. Pull straight up with steady even pressure. It is best not to twist and pull.

Part of the tick may remain embedded so try to extract if that is practical. If done quickly after the bite you should have prevented the tick transferring the infection. Disinfect the bite site after tick removal with an antiseptic ointment/cream.

Need further advice or information?

- ❖ NHS Inform www.nhsinform.co.uk
- ❖ NHS24 ☎ 111 www.nhs24.co.uk
- ❖ www.nhsborders.scot.nhs.uk
- ❖ Local health clinic or GP

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