

Lyme Disease and Tick Bourne Encephalitis

Lyme disease and Tick Bourne Encephalitis are caused by bacteria and viruses that are normally found on animals like deer or dogs and can be passed on to humans through a tick bite. April through to November is the most likely times for infection.

Lyme Disease

This is a multi-system illness caused by a bacteria spread through the tick bite.

Prevention

The best method of preventing Lyme disease is to be aware of the risks when visiting areas where catching the disease is possible and by taking sensible precautions.

Dress your child appropriately if going into areas where deer live – wear long sleeves and long trousers (even tucked into socks). Check your child regularly for tick bites especially after walking through woodland. Wearing light-coloured clothes can help you spot the tick as soon as it lands on you. Be aware of the signs and symptoms of Lyme disease and go to see your doctor as soon as you can if you think your child might have been infected.

If you find a tick, remove it straight away. The larval form of the tick is tiny and difficult to see. Adult ticks, once they have fed and become engorged, may be the size of a coffee bean. Common areas for ticks to attach are at the hairline, behind the ears, elbows, backs of knees, groin and arm pits. A tick is unlikely to spread the disease until it starts feeding which can be up to 12 hours after attaching to the skin. Hold the tick with tweezers near the point of attachment and as close to the skin as possible. Pull it away slowly ensuring the mouthparts are removed completely. Evidence suggests that a slow, straight pull with tweezers is best for removal without leaving the mouthparts behind. Care needs to be taken not to squeeze the body of the tick as this can push some of the stomach contents into the site of the bite.

Signs and Symptoms

The tick bite usually looks like a small lump with a scab on the skin surface at the site of the bite. Over the next couple of days this may develop into a slightly itchy red spot. The red spot expands steadily with an inflamed red border. This reddish skin-ring rash is called erythema migrans and can appear between 3 and 30 days after biting. The central red spot remains but the area between it and the border clears, forming an expanding 'target pattern' ring with a hardened, flat border up to 2 cm wide. In about half of cases, other similar spots appear. These may be scattered all over the skin, but occur most frequently in the armpits, groins and thighs.

The following symptoms may also develop:

- * Tiredness/fatigue
- * Aches in muscles and joints
- * General feeling of illness
- * Swollen glands.
- * Headache
- * Stiff neck
- * Fever

Early detection and treatment of the disease through antibiotics can help to reduce the symptoms and how long they last. For this reason, it is important to be aware of the signs and symptoms, particularly the erythema migrans rash. If you suspect that your child has been bitten by a tick or is showing signs/symptoms of Lyme disease it is important that they see a doctor.

Areas of risk

The web site <http://www.zecken.ch> gives more information on ticks and shows maps of Switzerland with those high risk forested areas marked on it. Locally to Zug the following wooded areas are considered to be at risk.

Luzern: Reiden/Langnau/Dagmersellen/Nebikon/Egolzwil/Kottwil/Sursee/Knutwil
Zug: Steinhausen
Zürich: Whole Kanton

Tick Bourne Encephalitis – known as FSME in Switzerland

Increasing cases of Tick Bourne Encephalitis (TBE) are being reported. This is caused by a virus, which is also carried by ticks. It is also possible to catch TBE by consumption of un-pasteurised dairy products in areas of risk as it can be passed on from an infected animal.

Prevention

As with Lyme disease the best prevention is to take action not to be bitten. For ways of protecting yourself see the paragraph on Lyme disease prevention above.

Vaccine

There is a vaccine available for TBE, which is normally given in spring. It is recommend by a local Baar Paediatrician that if you live in or around Steinhausen or Sihlwald that you should have the vaccine as they are high-risk areas. To find out whether it is recommended in the area you live you should talk to your doctor's office. The vaccine can be given to children aged 6 and older and is a course of 3 vaccines. Following the first injection a second dose is given 1-3 months later and the third one 9-12 months later. A booster dose is required 5-10 years to ensure continuous protection.

Signs and symptoms

The typical course of TBE is in two stages. After approximately 7-14 days after the tick bite the first stage of the disease can last from 1 – 8 days. It is characterised by a non-specific flu-like illness with fatigue, headache, nausea, general malaise and fever. An interval then occurs anywhere between 1 – 20 days when people are usually asymptomatic.

Approximately a third of those who were symptomatic during the first stage then proceed to a second phase of disease. They have a sudden rise in temperature and central nervous system involvement with meningitis. About a third of these cases progress to encephalitis.

The second stage of the illness in children is usually limited to meningitis whereas adults older than 40 years are at increased risk of developing encephalitis.

Treatment

Treatment relies on supportive management; there is no specific anti viral treatment for TBE.

Risk Areas

The whole of Switzerland is considered to be risk areas for Tick Bourne Encephalitis. More details are available on the website <http://www.zecken.ch>

We hope this information helps you and your family enjoy the beautiful Swiss countryside safely.

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