Lassa fever

Lassa haemorrhagic fever is a viral disease that occurs in West Africa. While it does not occur in Europe, it can be introduced to the continent by travellers who become infected while visiting or staying in African countries, and then fall ill upon arrival. The last imported case of the disease in Europe occurred in 2024.

The cause

Lassa fever is caused by the Lassa virus from the Arenavirus family.

Reservoir

The natural reservoir of the virus are rats of the Mastomys genus.

Transmission

Humans can become infected through contact with infected rats' secretions (urine, saliva and faeces), contaminated objects or contaminated food and water. The Lassa virus is transmitted between humans through contact with blood (through broken skin or mucous membranes), bodily fluids and secretions (e.g. saliva, urine, vomit) of an infected person, and through direct contact with objects contaminated with these fluids or secretions.

Susceptibility to infection

Anyone of any age can be infected.

Those living in rural areas where the disease is present, especially in poor housing conditions with poor hygiene, are at greatest risk of infection. Healthcare workers who care for infected patients without wearing the appropriate protective equipment or following measures to prevent the spread of infection are also at greater risk.

Incubation period

The incubation period, or the time from infection to the onset of disease, lasts 6–21 days.

Symptoms and signs

Around 80% of people infected with the virus will not develop symptoms.

When the disease is symptomatic, it manifests as an elevated body temperature, general weakness and malaise. This is followed by a headache, a sore throat, muscle and chest pain, nausea, vomiting, diarrhoea, a cough and abdominal pain. Some patients may also experience facial swelling, seizures, deafness, internal and external bleeding, and multiple organ failure.

Mortality rate

The overall mortality rate from Lassa fever is around 1%. If the infected person is pregnant, there is a high risk of miscarriage, occurring in around 95% of cases.

Diagnosis

The diagnosis is confirmed by a laboratory blood test, which detects the presence of the virus or antibodies.

In Slovenia, diagnostic testing is carried out by the Institute of Microbiology and Immunology.

Differential diagnosis

Other diseases, such as malaria, shigellosis, typhus and viral haemorrhagic fevers, exhibit a similar clinical picture.

Infectiousness

A person is infected form the moment symptoms appear, and will remain so for as long as the virus is present in their blood and other bodily fluids. The remains of the deceased are also infectious.

Treatment

The antiviral drug ribavirin is used to treat the disease, being most effective when administered within the first six days of the onset of symptoms. The drug is not safe to use during pregnancy.

Currently there is no evidence to suggest that ribavirin is effective in the prophylactic treatment of Lassa haemorrhagic fever.

Infection prevention

There is currently no safe and effective vaccine against Lassa fever. Prevention of infection is therefore based on measures to reduce the possibility of disease transmission.

The aim of protective measures is to avoid contact with infected animals. These measures include rodent control (deratisation), preventing rodents from entering homes and workplaces, and safely removing their nests and droppings. Maintaining cleanliness and disposing of food waste in containers or bins that are inaccessible to rodents is also important.

In order to prevent human-to-human transmission, close contact with sick and infected persons should be avoided. Special precautions are necessary when caring for patients, such as contact isolation and the use of gloves, protective clothing, masks and goggles, as well as maintain good hygiene practices.

We recommend that you:

- Avoid contact with the blood and bodily fluids of infected people;
- Avoid contact with the semen of a person who has recovered from the disease for three months after they have recovered;
- Not touch objects that may have come into contact with an infected person's bodily fluids;
- Avoid contact with rats and do not eat their meat in areas where the disease is present.