



Who

Lassa fever is endemic in parts of West Africa. There are approximately 300,000 cases and 5000 deaths annually. Several cases of Lassa fever have been confirmed in international travelers staying in traditional dwellings in the countryside.

What

Lassa fever which was first recognized in Lassa, Nigeria, is a viral hemorrhagic illness. Humans usually become infected through exposure to food or household items contaminated with urine or feces of the specific rodent reservoir, the multimammate (*Mastomys*) rat. Person-to-person infections can also occur, particularly in health care settings lacking adequate infection prevention measures.

Where and when

Lassa fever is mainly known to be endemic in the forested regions of Guinea, Liberia, Sierra Leone, Nigeria, Benin, Ghana, and Mali. Other neighboring countries may be also at risk as the specific rats are distributed throughout the region. Cases occur at all times of year; the peak incidence occurs in March, during the transition from dry to wet season.

Prevention

No vaccine for the prevention of Lassa virus infection is available yet. Residents and travelers should store food in rodent-proof containers, trap rodents in and around homes, and avoid using rodents as a food source. Blood and body fluid specimens from patients with suspected infection should be considered highly infectious.



Symptoms

The incubation period is one to three weeks. About 80% of infected people have no symptoms. Symptoms in the remaining patients include pharyngitis, cough, nausea, vomiting, diarrhea, and pain in muscles, chest, back, and abdomen. In severe cases, lung edema, hypotension, shock, seizures, coma, and bleeding from the mouth, nose, vagina, or gastrointestinal tract may develop.



Treatment

Supportive care consists of maintenance of oxygenation and blood pressure as well as fluid replacement. In addition, treatment consists of the antiviral drug ribavirin which has been reported to be most effective when given within the first 6 days after onset of fever.

In case of infection

Early supportive care with rehydration and symptomatic treatment improves survival. The overall case-fatality rate is 1%, but is estimated at 15% among patients with severe clinical presentation. The most common complication of Lassa fever is deafness, which occurs in up to one-third of patients during acute illness or convalescence. Hearing may improve in approximately half of cases.