Listeriosis is a bacterial infection most commonly caused by *Listeria monocytogenes*, although *L. ivanovii* and *L. grayi* have been reported in certain cases. Listeriosis can cause severe illness, including severe sepsis, meningitis, or encephalitis, sometimes resulting in lifelong harm and even death. Those at risk of severe illness are the elderly, unborn babies, newborns and those who are immunocompromised.

Listeria is ubiquitous and is primarily transmitted via the oral route after ingestion of contaminated food products, after which the organism penetrates the intestinal tract to cause systemic infections.

Signs and symptoms

The disease primarily affects older adults, persons with weakened immune systems, pregnant women, and newborns. Rarely, people without these risk factors can also be affected. A person with listeriosis usually has fever and muscle aches, often preceded by diarrhea or other gastrointestinal symptoms. Almost everyone who is diagnosed with listeriosis has invasive infection (meaning that the bacteria spread from their intestines to their blood stream or other body sites). Disease may occur as much as two months after eating contaminated food.

Diagnosis

Listeria monocytogenes grown on Biorad RAPID'L.Mono Agar
In CNS infection cases, *L. monocytogenes* can often be cultured from the blood or from the CSF (Cerebrospinal fluid).

Prevention

The main means of prevention is through the promotion of safe handling, cooking and consumption of food. This includes washing raw vegetables and cooking raw food thoroughly, as well as reheating leftover or ready-to-eat foods like hot dogs until steaming hot.

Another aspect of prevention is advising high-risk groups such as pregnant women and immunocompromised patients to avoid unpasteurized pâtés and foods such as soft cheeses like feta, Brie, Camembert cheese, and bleu. Cream cheeses, yogurt, and cottage cheese are considered safe.

Treatment

Bacteremia should be treated for 2 weeks, meningitis for 3 weeks, and brain abscess for at least 6 weeks. Ampicillingenerally is considered antibiotic of choice; gentamicin is added frequently for its synergistic effects. Overall mortality rate is 20–30%; of all pregnancy-related cases, 22% resulted in fetal loss or neonatal death, but mothers usually survive.[9]