

CLINICAL SIGNIFICANCE OF LISTERIA MONOCYTOGENES IN HUMAN FAECES

Distribution

Listeria monocytogenes is very widely distributed in nature in soil, water, sewage, plant material and numerous species of birds and mammals. Approximately 5% of healthy humans carry *Listeria monocytogenes* in the gut.

Food

Listeriosis is a serious but rare food-borne disease. Many foods can contain *Listeria monocytogenes*, albeit usually at low levels which are considered to be of very low risk for health.

Febrile Gastroenteritis and significance of *Listeria monocytogenes*

Outbreaks of gastroenteritis caused by *Listeria monocytogenes* have been described with cases having fever, malaise, headache, vomiting and diarrhoea. As noted above, 5% of humans carry in the gut and it is not known how frequently *Listeria monocytogenes* causes sporadic cases of gastroenteritis. Hence, finding *Listeria monocytogenes* in a faecal sample may be incidental and not related to the actual cause of the diarrhoea. Diagnosis of Listeriosis in these cases is achieved by culturing the patient's blood.

Invasive Disease, Septicaemia and Meningitis

Septicaemia and meningitis can be caused by *Listeria monocytogenes*, particularly in elderly patients, and those who are severely immunocompromised or on immunosuppressive drugs. Septicaemia in patients over 60 years of age is the most common presentation of the disease.

Pregnancy Associated Disease

Listeriosis can occur when the bacterium infects the unborn infant and is most often diagnosed during the third trimester of pregnancy. The mother may be asymptomatic or have a mild 'flu-like illness and a diagnosis can be made by culturing *Listeria monocytogenes* from maternal blood. Trans-placental spread can occur and the foetus can develop severe infection. Pregnant women (as well as the immunocompromised) are advised to avoid mould ripened soft cheese (such as camembert and brie) and pâté, as well as to re-heat cook chill food until piping hot. Routine screening of healthy pregnant women for *Listeria monocytogenes* is not recommended.

Antibiotic Treatment

If *Listeria monocytogenes* is isolated from a high risk patient, e.g. elderly (>60y), pregnant woman or immunocompromised person, and there is evidence of systemic symptoms, e.g. pyrexia then antibiotic treatment may be considered. Advice on antibiotic treatment should be sought from your local microbiology laboratory.