Suggested Framework for Medical Management of Persons Exposed to L. monocytogenes

Little scientific evidence is available to inform decisions regarding management of persons at elevated risk for invasive listeriosis who have been exposed to L. monocytogenes and who are either asymptomatic or mildly symptomatic. This suggested framework is adapted from guidance provided by the Centers for Disease Control and Prevention and is based largely on expert opinion. Patient management decisions for asymptomatic or mildly symptomatic persons are appropriately made on a case-by-case basis, informed by clinical judgment and the likelihood of exposure of the patient.

Listeriosis is a rare disease; less than 10 cases of invasive listeriosis generally occur each year in Minnesota. Medical management of exposed persons is most important for groups at elevated risk for invasive listeriosis, which include pregnant women, persons with immunocompromising conditions, and older adults.

Symptoms may include fever and myalgias, often preceded by diarrhea or other gastrointestinal symptoms. In older adults and immunocompromised persons, symptoms of listeriosis also can progress to headache, stiff neck, confusion, loss of balance, and/or convulsions.

Stool culture has not been evaluated as a screening tool. It may have low sensitivity unless enrichment procedures are performed. The MDH Public Health Laboratory (PHL) does not test stool specimens for L. monocytogenes except under extraordinary circumstances. Do not send stool specimens to the MDH PHL for L. monocytogenes testing unless approved by an MDH epidemiologist or laboratorian. Please continue to submit Listeria isolates to the MDH PHL for routine disease reporting.

Previously healthy individuals that are not in a group at elevated risk for invasive listeriosis (i.e., not pregnant, immunocompromised, or older) who ate a product recalled because of L. monocytogenes contamination are only a concern if presenting with symptoms of invasive listeriosis, and should be managed accordingly. Gastroenteritis without signs of invasive listeriosis in these individuals is more likely to be attributable to much more common causes, including norovirus.

Asymptomatic patients: All patients (i.e., healthy individuals and groups at elevated risk for invasive listeriosis)

For all patients, most experts believe that no testing or treatment is indicated for an asymptomatic individual who ate a product recalled because of L. monocytogenes contamination. Such a patient should be instructed to return if he or she develops symptoms of listeriosis within 2 months of eating the recalled product.

Afebrile, mildly symptomatic patients: Groups at elevated risk for invasive listeriosis

A person with elevated risk of invasive listeriosis (including pregnant women) who ate a product recalled because of L. monocytogenes contamination who is afebrile and has signs and symptoms consistent with a minor gastrointestinal illness, such vomiting or diarrhea, could be managed expectantly (as for an exposed, asymptomatic person); this is a reasonable approach to limit low-yield testing and support judicious use of antimicrobial agents.

Alternatively, such a patient could be tested with blood culture and/or with stool culture for Listeria, where such testing is available* (see above). If diagnostic tests are performed, some experts would withhold antibiotic therapy unless cultures yielded L. monocytogenes. Others would initiate antibiotic therapy while culture results were pending and then stop treatment if the cultures were negative. The antibiotic regimen could consist of oral ampicillin or amoxicillin, although it is important to note that no effectiveness data exist for this scenario. If stool culture is positive, therapy could continue for 10-14 days.

Febrile patients with symptoms consistent with invasive listeriosis: Groups at elevated risk for invasive listeriosis

An exposed person with elevated risk of invasive listeriosis (including pregnant women) with fever (>100.6° F, >38.1°C) and signs and symptoms consistent with listeriosis, for whom no other cause of illness is known should be tested and treated for presumptive listeriosis. The febrile illness may be accompanied by myalgias and headache, often preceded by diarrhea or other gastrointestinal symptoms, and, in older adults and immunocompromised persons, may include headache, stiff neck, confusion, loss of balance, and/or convulsions.

- Diagnostic testing should include blood culture and other tests, such as culture of cerebrospinal fluid, as indicated by the clinical presentation.
- The antimicrobial regimen should be the standard therapy for listeriosis, typically including IV ampicillin and gentamicin for 14 to 21 days for nonallergic patients.
- If blood culture is negative and symptoms resolved, antibiotic therapy may be discontinued.

Patients with history of symptoms in past 4 weeks, currently asymptomatic: Groups at elevated risk for invasive listeriosis

Most experts believe that no testing or treatment is indicated for an asymptomatic person with elevated risk of invasive listeriosis (including pregnant women) who ate a product recalled because of L. monocytogenes contamination and experienced symptoms that have resolved. Any such patient should be instructed to return for medical care if he or she develops symptoms of listeriosis within 2 months of eating the recalled product. For pregnant women, diagnostic testing, such as culture of blood or amniotic fluid, has been considered in such patients, depending on the clinical scenario.