
A Public Listeria Health Alert

Citation

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Abstract

LISTERIA HEALTH INFORMATION FOR HEALTH PROFESSIONALS

The Texas Department Of Health Has Issued A Public Listeria Health Alert. There has been a recent increase in listeriosis hospitalizations in North Texas; 4 cases were hospitalized between May 13 and May 23 and the average age of patients was 58 years. There have been several foods under recall for *Listeria monocytogenes* contamination: hot dogs, breakfast tacos, and breakfast sausage. The recalls have been posted to the TDH website at <http://www.tdh.state.tx.us/ideas/hottopic/hottop.htm>.

Listeriosis most often causes meningitis (75%) or sepsis. In one series, 34% of cases were associated with pregnancy; 50% occurred in persons with weakened immune systems (persons with cancer, diabetes, tuberculosis, kidney disease, AIDS, alcoholism, persons on glucocorticosteroids, and elderly persons); and 14%, in normal adults. Clinicians are advised to consider a diagnosis of *L. monocytogenes* in persons who present with a compatible clinical picture and a history of consumption of recalled product(s).

Adults, particularly pregnant women, with listeremia may present with a flu-like illness with fever, chills, muscle aches, nausea, and/or diarrhea. Symptoms may subside without treatment. Listerial meningitis in the adult may be subtle. Although patients may present with full-blown signs of meningeal irritation such as headache, stiff neck, mental status change, loss of balance, and/or convulsions, they may also present with low-grade fever and personality change. Cerebritis is less common, and is easily overlooked.

Patients with cerebritis may present with headache and fever or with varying degrees of paralysis resembling a cerebrovascular event. Presentation in newborns varies depending on when the fetus/infant acquired the infection. Bacteremias in pregnant women may lead to amnionitis and infection of the fetus, resulting in spontaneous abortion, stillbirth, or premature birth of an infected infant. Infants infected in utero may have granulomatosis infantiseptica.

Such infants may appear ill at birth or look weak and progress to respiratory or circulatory insufficiency; they may have skin lesions or conjunctivitis. These infants have multiple disseminated abscesses or granulomas. Therapy must be instituted immediately as the fatality rate approaches 100% with this condition. Infants with sepsis typically present with fever after the third day. Infants with meningitis may present only with failure to thrive or poor appetite with or without low-grade fever.

Diagnosis of CNS infection in adults is based on the culture of cerebrospinal fluid (CSF) and blood. Because the number of organisms in CSF may be low, early diagnostic tests such as the direct examination of specimens by Gram stain (for gram-positive rods) are often negative and at least 10 ml of CSF should be cultured. Blood and CSF specimens cultured before the administration of antibiotics may detect *L. monocytogenes* within 1-2 days. In the newborn the diagnosis is made by detecting the organism in CSF, blood, amniotic fluid, respiratory secretions, placenta or cutaneous swabs, gastric aspirate, or meconium. The organism may also be detected in the mother's blood, lochia, or vagina.

Isolation may be difficult. Clinical specimens from normally sterile sites (e.g., CSF) should be inoculated into blood agar and kept at 35°C in an incubator but no longer than 48 hours before processing. Unsterile clinical specimens (e.g., meconium or tissue) must be processed immediately. If transport or delay in processing is 48 hours or more, the specimen should be placed at 4°C or frozen at -20°C to prevent overgrowth by other microorganisms. With prior approval from Infectious Disease Epidemiology & Surveillance Division (IDEAS), isolates can be sent to the TDH lab for confirmation or molecular typing on a nonglucose containing agar slant, such as trypticase soy agar or heart infusion agar.

Confirmed cases should be reported to local health departments at 1-800-705-8868. Please also call IDEAS at 1-800-252-8239 or (512) 458-7676 to discuss whether to

send isolates to the TDH laboratory for comparison studies.

References

Author Information