ORGANIZATION OF TERATOLOGY INFORMATION SERVICES

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Listeriosis and Pregnancy

The information below will help you determine if your prenatal exposure to listeriosis will increase the fetal risk above the background risk. With every pregnancy, any women has a 3 to 5 percent chance of having a baby with a birth defect. The information contained in this fact sheet should not be used as a substitute for the medical care and advice of your health care provider.

What is listeriosis?

Listeriosis is an infection caused by *Listeria monocytogenes* bacteria. These bacteria are found in soil, dust, water, unwashed raw produce, fish, undercooked poultry, prepared meats such as hot dogs and deli meats, and feces of domestic and wild animals. The most common source of infection is contaminated food such as deli meats, unpasteurized milk or dairy products, soft cheeses, and paté. Once infected, *Listeria* lives in the gastrointestinal tract. There are several species of *Listeria*, but only *Listeria monocytogenes* is a cause for concern in humans.

Who is at risk for listeriosis?

Listeriosis occurs in 0.7 per 100,000 people. Pregnant women, young children and older adults over the age of 60, and adults with weakened immune systems are at a higher risk of being infected. The chance of listeriosis infection can be reduced by following a few simple food safety recommendations.

What precautions should I take to avoid the infection?

To decrease the risk of listeriosis and other food-borne illness in ***all individuals***:

- Thoroughly cook raw foods from animal sources.
- Wash raw vegetables.
- Separate uncooked meats from cooked meats and vegetables.
- Wash hands, cutting boards and knives after contact with uncooked foods.

Pregnant women should take additional precautions to decrease the risk of listeriosis.

- Avoid soft cheeses (such as feta, Brie, Camembert, Mexican-style cheeses and blue veined cheeses), unless they are in a fully cooked dish.. Hard cheeses, pasteurized cheese slices, cream cheese, cottage cheese, and yogurt can be safely consumed.
- Reheat to steaming any leftover and ready-to-eat food, such as hot dogs, cold cuts and deli meat.
- Do not eat refrigerated pate, meat spreads or refrigerated smoked seafood, unless it is an ingredient in a fully cooked dish.
- Avoid unpasturized milk and dairy products.

How do I know if I've been infected with Listeria?

A blood test can detect whether you have been infected with listeriosis. Symptoms of listeriosis may range from showing no symptoms to exhibiting diarrhea, fever, muscle pain, joint pain, headache, stiff neck, backache, chills and sensitivity to bright light, or sore throat with fever and swollen glands. These symptoms can begin 2-8 weeks after eating contaminated food.

I am pregnant and have been infected with Listeria. Will this affect my baby?

Although a woman may have been infected, it is still possible that the baby has not. Unfortunately, there is a risk of miscarriage, stillbirth, uterine infection, premature labor, and death in the newborn period for women infected

with *Listeria* during pregnancy. These complications may occur 2-14 days following maternal infection. Early diagnosis and treatment with high doses of antibiotics may prevent infection of the unborn baby and result in the birth of a healthy infant.

No increased risk for pregnancy loss or birth defects have been reported in women who did not have symptoms of infection. Currently, there is no evidence that listeriosis is a cause of repeat miscarriages in women. There is however a slightly increased risk for meningitis in babies, occurring 2 weeks after delivery, and is most likely related to *Listeria* present in the mother's birth canal.

Is there any way to know if the baby has been infected or harmed by listeriosis?

The same blood test that can be performed on you can also be performed on the baby after birth to detect whether the baby has been infected with *Listeria*. An ultrasound to look at the baby can be used to check for an enlarged heart, thickened bowel, and increased thickness of the stomach walls, which may occur in some babies infected with *Listeria*.

Are there any treatments for listeriosis during pregnancy?

Listeria has a strong ability to survive and grow within cells; and therefore, large doses of antibiotics such as ampicillin or penicillin are generally recommended. Therapy for maternal listeriosis with high doses of antibiotics has resulted in successful therapy for the developing baby, leading to lower incidences of premature deliveries and stillbirths.

Can Listeria be passed to the baby through breastmilk?

While it may be possible to pass *Listeria* on to an infant through breastmilk, there are no reports of infection occurring in this way.

Does it matter if the baby's father was exposed to Listeria before I got pregnant?

There is no evidence linking paternal exposure to *Listeria* with higher incidences of infection during pregnancy.

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References:

Bennet, Lorber. 1996. Listeriosis. Clinical Infectious Diseases. 24:1-11.

Craig, S., Permezel, M., Doyle, L., Mildenhall, L., and Garland, S. 1996. Perinatal infection with Listeria Monocytogenes. Australian and New Zealand Journal of Obstetric Gynaecology. 36(3): 286-290.

Gellin, BG., and Broome, CV. 1989. Listeriosis. Journal of the American Medical Association. 261:1313-1320.

Lurie, S., Feinstein, M., and Mamet, Y. 1999. Listeria monocytogenes reinfection in a pregnant woman. British Journal of Obstetrics and Gynaecology. 106:509-510.

Quinlivan, JA., Newnham, JP., and Dickinson, JE. 1998. Ultrasound features of congenital listeriosis- A case report. Prenatal Diagnosis. 18:1075-1078.

Silver, HM. 1998. Listeriosis during pregnancy. Obstetrical and Gynecological Survey. 53(12):737-740.

Tappero, JW., Schuchat, A., Deaver, KA., Mascola, L., and Wenger, JD. 1995. Reduction in the incidence of human listeriosis in the United States: Effectiveness of prevention efforts? Journal of the American Medical Association. 273:1118-1122.