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Lymphocytic Choriomeningitis Virus (LCMV) and Pregnancy

This sheet talks about the risks that exposure to LCMV can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What is Lymphocytic Choriomeningitis Virus (LCMV)?

LCMV is a virus that can cause flu-like symptoms including fever, muscle aches, fatigue, nausea and vomiting. Some people will develop meningitis (inflammation of the spinal cord) or encephalitis (inflammation of the brain). Some people will not have any symptoms at all. The onset of flu-like symptoms starts 1-2 weeks after being exposed to the virus. These symptoms can last as long as a week. If the infection goes on to affect the spinal cord or brain, the entire length of infection can be up to 3 weeks.

LCMV is not thought to be a common virus in humans. The Centers for Disease Control and Prevention (CDC) estimates that 2% to 5% of adults have had an LCMV infection. Rodents such as mice, guinea pigs, and hamsters carry the virus. Wild rodents, pet rodents, and rodents in laboratories have all been found to carry LCMV.

How could I get LCMV?

Infected rodents shed the virus in their nasal secretions, saliva, milk, semen, urine, and feces. Physical contact or accidental ingestion of these rodent body fluids may cause an LCMV infection. Sweeping rodent droppings may cause the virus to become airborne and increase the chances of getting an infection. The virus can also be passed through rodent bites. Human infection with this virus is more common in the fall when rodents move indoors

into homes. Passing the LCMV infection from person to person has not been seen except in the case of mother to baby during pregnancy.

How will I know if I have LCMV?

If you have come in contact with a rodent, and/or have a fever or other symptoms of LCMV, you should contact your physician. A blood test can be done to determine if you have a LCMV infection or if you had an infection in the past. While there is no specific treatment for LCMV, appropriate treatment of the symptoms (such as fever) is recommended.

If I'm in my first trimester, will an LCMV infection cause a miscarriage?

A woman who gets an LCMV infection during her pregnancy may have an increased chance for a miscarriage. Information regarding LCMV and miscarriage is very limited and the exact risks for miscarriage are unknown.

How does LCMV affect the developing baby?

If a woman becomes infected with LCMV during her pregnancy, the virus may also infect the developing baby. A small number of children have been reported with LCMV infection at birth (also known as congenital LCMV). Infants with congenital LCMV may have problems affecting brain and eye development, as well as learning

difficulties. The most common birth defects are hydrocephalus (fluid in the brain) and chorioretinitis (eye problems which can lead to vision loss). It is not known whether the severe cases of congenital LCMV reported are the typical presentation or if they represent the severe end of the spectrum.

It is not known how common LCMV infection is or how often congenital LCMV occurs. Thus it is unknown how many women have had LCMV during pregnancy and had healthy babies. Current data suggest that the cases of LCMV infection and congenital LCMV are under-reported. Many cases of LCMV go undetected as the symptoms are so similar to the flu. Because of the limited amount of information about LCMV in humans, the exact risks for LCMV related birth defects are unknown.

Having had a LCMV infection in the past does not increase the risk for congenital LCMV in a current or future pregnancy.

Can LCMV infection in the baby be detected during pregnancy?

Certain findings on ultrasound, such as enlarged areas of the brain (ventriculomegaly), excess fluid in the skull around the brain (hydrocephaly), or buildup of fluid in the body tissues (hydrops), can indicate a possible LCMV infection. The mother's blood can also be tested for evidence of an LCMV infection.

How can I prevent getting an LCMV infection?

The risk of LCMV infection is low. However, pregnant women can take the following precautions to lower the risk of LCMV infection:

- Avoid direct physical contact with wild or pet rodents.
- If possible, have someone else care for pet rodents and clean their cages.
- If you do come in contact with a rodent or its urine, droppings, or nesting

materials, wash hands very well with soap and water afterwards.

- If you think there are wild mice in your home, have a professional pest control company remove them.
- Avoid vacuuming or sweeping rodent urine, droppings, or nesting materials.

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If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.