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Congenital CMV infection is a major source of childhood disability, including hearing loss, vision loss, and cognitive impairment. The estimated 5,000-8,000 children per year who develop disabilities associated with CMV infection is similar to or higher than the number estimated to be affected by better-known conditions, including Down syndrome and neural tube defects. Women who experience their first (i.e., primary) infection during pregnancy are at highest risk for transmitting CMV to their fetuses, with approximately 33% of fetuses becoming infected. However, women who have experienced an infection before pregnancy and then have a recurrent infection (i.e., a viral reactivation or reinfection with a different strain) during pregnancy also can transmit CMV to their fetuses, with approximately 1% of fetuses becoming infected. Most infections among pregnant women are believed to occur through contact with the urine or saliva of infected children or through sexual activity.

Numerous potential interventions exist for preventing congenital CMV infections or disease. Several vaccines are being developed, although progress has been slow. The effectiveness of certain interventions is controversial, including antiviral treatment or passive immunization using hyperimmune globulin for pregnant women with primary CMV infection and antiviral treatment for newborns with congenital infection. Other types of interventions, such as newborn screening and follow-up to identify developmental disabilities and improve language or educational development, target secondary outcomes.

CMV can be transmitted through sexual contact, which is important for women to know. Because of the numerous programs and resources already in place to promote healthy and safe sexual practices for infections other than CMV (e.g., existing HIV/AIDS programs), this survey of OB/GYNs focused on prevention messages that might not be as widely promoted during pregnancy, such as good hand hygiene.

Whether OB/GYNs should routinely test pregnant women for CMV is a complicated matter. An initial negative maternal immunoglobulin G (IgG) test, which indicates that the woman has never been infected with CMV, might indicate a higher risk for fetal infection if the mother subsequently becomes infected during pregnancy and thus might be a useful motivational tool to encourage the mother to practice good hygiene. A positive maternal IgG test might indicate lower risk for fetal infection; nevertheless, good hand hygiene still should be advised to prevent possible maternal CMV reinfection. Additional CMV assays (e.g., immunoglobulin M) are difficult to interpret, often not commercially available in the United States (e.g., IgG avidity), or invasive (e.g., polymerase chain reaction testing of amniotic fluid). Furthermore, testing algorithms that use these assays are only moderately effective at predicting maternal infection, fetal infection, and fetal damage. For these reasons, and because no proven treatment exists, routine CMV testing during pregnancy is not recommended; testing is recommended only when a fetal anomaly is detected, a pregnant woman experiences a mononucleosis-like illness, or a pregnant woman requests the test.
Because no vaccine is available and treatment options are limited, renewed attention has been given to prevention of CMV infections among pregnant women through traditional infection-control practices, such as good hand hygiene. These practices have been encouraged by organizations such as CDC and the American College of Obstetricians and Gynecologists (ACOG), which recommend that obstetricians and gynecologists (OB/GYNs) counsel women on careful handling of potentially CMV-infected articles, such as diapers, and thorough hand washing after close contact with young children. Despite this increased emphasis on avoiding infection during pregnancy, few women are aware of CMV infection and how it can be prevented. During March-May 2007, ACOG surveyed a national sample of OB/GYNs to assess their knowledge and practices regarding CMV infection prevention. The results of that survey indicated that fewer than half (44%) of OB/GYNs surveyed reported counseling their patients about preventing CMV infection. These results emphasize the need for additional training of OB/GYNs regarding CMV infection prevention and for a better understanding of the reasons that physician knowledge regarding CMV transmission might not result in patient counseling.

In March 2007, ACOG mailed surveys to members of the ACOG Collaborative Ambulatory Research Network (CARN), a group of practicing OB/GYNs who were identified via a stratified sampling scheme as representative of ACOG relative to geographic location, age, and sex and who are invited to participate in periodic ACOG surveys. Of the 606 eligible CARN members, surveys were received from 305 (response rate: 50%). The respondents were statistically different (p<0.05) from the overall group of ACOG members relative to mean age and geographic district. Although 90% of OB/GYNs reported knowing that washing hands reduces the risk for CMV infection during pregnancy, a smaller proportion were aware that not sharing utensils (57%) and avoiding children's saliva (55%) reduces infection risk. Sixty percent of OB/GYNs reported that they routinely recommended hand washing to pregnant women; approximately one third reported routinely recommending that pregnant women not share utensils and avoid child saliva (31% and 30%, respectively). Fewer than half (44%) of OB/GYNs reported having counseled their patients about prevention of CMV infection.

Approximately one fourth (27%) of OB/GYNs reported having diagnosed CMV infection in a pregnant woman since 2003. Among the 86% of OB/GYNs who reported ever testing for CMV during pregnancy, most provided CMV testing only if their patients requested a test or because a fetal anomaly was identified, consistent with ACOG recommendations and CDC recommendations that CMV testing during pregnancy be performed under certain circumstances, which include the development of a mononucleosis-like illness during pregnancy.

Based on the survey, fewer than half of OB/GYNs reported counseling their patients regarding CMV-infection prevention. In addition, responses indicated that many OB/GYNs did not have a comprehensive understanding of modes of CMV transmission and possible prevention measures. These results emphasize the need for additional training of OB/GYNs regarding CMV infection prevention and better understanding of the reasons that physician knowledge about CMV transmission does not necessarily result in patient counseling.

**Influenza Update:**
Although still widespread, influenza reporting is slowing down in Arkansas. We have had 17 deaths from influenza or influenza complications reported so far this season.

If you have any problems or questions please feel free to contact Dr. Sandy Snow at 501-661-2169 or fax to 501-661-2300 or e-mail to sandra.snow@arkansas.gov.