FAST FACTS: VALACYCLOVIR TO PREVENT CONGENITAL CMV

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Globally, up to 2% of live births are affected by congenital cytomegalovirus (CMV) infection, the leading non-genetic cause of sensorineural hearing deficit and neurological impairment. Although primary maternal infection during the first trimester or periconceptual period carries the highest risk for severe sequelae of congenital CMV, recent findings confirmed that oral antiviral treatment with valaciclovir can prevent transmission of CMV to the fetus in 70% of cases.

New consensus guidelines released by the European Congenital Cytomegalovirus Initiative (ECCI) have made the following recommendations based on these findings:

- Maternal CMV serology should be performed in the first trimester of pregnancy (as soon as possible once pregnant), as primary infection during this trimester carries the greatest risk of sequelae associated with congenital CMV.
- For seronegative women, as evidenced by a negative screening CMV IgG, it is recommended to retest CMV serology every 4 weeks until 14-16 weeks of gestation.
- CMV serology is not recommended in pregnant women beyond 16 weeks except in cases where clinically indicated (e.g. findings compatible with CMV on ultrasound, or in pregnant women with symptoms compatible with primary CMV infection).
- CMV IgG avidity testing is recommended to exclude a recent maternal primary infection in cases with positive IgM and positive IgG.
- If a primary maternal CMV infection is confirmed in the first trimester (or periconceptual), oral valaciclovir at a dose of 8 g/day should be administered as early as possible until an amniocentesis is performed.
- A CMV PCR on amniotic fluid collected from at least 17 weeks gestation is recommended for the diagnosis of fetal CMV infection, provided that maternal infection occurred at least 8 weeks earlier. If the CMV PCR is negative, reassurance is recommended since late fetal infection (after the amniocentesis) is not associated with long-term sequelae.

TAKE HOME MESSAGE

- Ampath now recommends that baseline CMV serology be performed as early as possible in the first trimester or prior to pregnancy as part of routine antenatal screening.
- In women who test CMV IgG negative, follow-up CMV serology is recommended until 16 weeks of gestation.
- CMV IgG avidity testing will be performed in women of childbearing age if the CMV IgM and IgG are both positive.

REFERENCE:

1. Leruez-Ville M, Chatzakis C, Lilleri D, Blazquez-Gamero D, Alarcon A, Bourgon N, et al. Consensus recommendation for prenatal, neonatal and postnatal management of congenital cytomegalovirus infection from the European congenital infection initiative (ECCI). The Lancet Regional Health–Europe. 2024 May 1;40.