

Fetal and Neonatal Effects of Maternally-Acquired Infections

Objectives

- Describe the underlying pathogenesis for transmission of viral infections from mother to child and include the potential impact of the prevalence of infection in women of childbearing age and the incidence of new infections in pregnancy
- List the viruses described for which unique mother-to-child transmission (MTCT) transplacentally, during birth or by ingestion of breast milk produces well-characterized clinical consequences
- Identify the maternal and neonatal risks, potential preventive or treatment measures, characteristic ultrasound findings, and the neonatal features and outcomes as known for commonly encountered viral infections as well as for toxoplasmosis and syphilis

Content Outline

1. Viral Infections Encountered in the Fetus and Neonate
 - 1.1 Pathogenesis and transmission of virus from mother to child (MTCT)
 - 1.1.1 Recommendations regarding breastfeeding in US
 - 1.2 Maternal risks and sources of infection
 - 1.3 Fetal/neonatal manifestations of viruses with well-characterized clinical consequences resulting from MTCT
 - 1.3.1 Cytomegalovirus (CMV)
 - 1.3.2 Hepatitis B (HBV) and C
 - 1.3.3 Herpes simplex virus (HSV)
 - 1.3.4 Human immunodeficiency virus (HIV)
 - 1.3.5 Lymphocytic choriomeningitis virus (LCMV)
 - 1.3.6 Parovirus B19
 - 1.3.7 Rubella virus
 - 1.3.8 Varicella-zoster (VZV)
 - 1.3.9 Zika
2. Maternal Infections in Pregnancy with Risk for Vertical Transmission to the Fetus
 - 2.1 Description of pathogen, mode of transfer, transmission risk, ultrasound features, prevention/treatment and newborn features and outcomes for viral infections described
 - 2.2 Non-viral infections with recognized fetal/neonatal impact
 - 2.2.1 Toxoplasmosis
 - 2.2.2 Syphilis

Reading Material Resources

Module WB2460: Fetal and Neonatal Effects of Maternally-Acquired Infections is based on the resources listed below. A copy of each resource is included with the module.

Chapter 93 Viral Infections in the Fetus and Neonate, Pinninti S in *Pediatric Infectious Disease*, Elsevier, (2023), 572-575

Infections in Pregnancy, Dunkerton SE and Brewster J, *Obstetrics, Gynaecology and Reproductive Medicine*, 31:11 (2021), 303-309