

TORCHeS Screening

There are several serious maternal infections that are associated with congenital anomalies and disorders. The acronym, TORCHeS, stands for **t**oxoplasmosis, **o**ther (gonorrhea, hepatitis B, varicella-zoster virus, parvovirus B19, and HIV), **r**ubella, **c**ytomegalovirus, **h**erpes simplex virus, and **s**yphilis. The pathogen spreads from the infected mother to the infant *in utero*, causing a variety of congenital anomalies depending on the infection.



PLAY PICMONIC

TORCHES

Toxoplasmosis

Tux-plasma Gandhi

This is a protozoal infection often transmitted by contact with cat feces, and is often associated with pregnant women changing cat litter boxes. Findings can include hydrocephalus and chorioretinitis.

Other

Other-causes

This category includes infections such as gonorrhea, varicella, hepatitis B virus (HBV), human immunodeficiency virus (HIV), and parvovirus. There are a variety of conditions that can have adverse effects on the fetus. Testing for these conditions is imperative in the prenatal period. Determining immunity status via titers can assist with identifying those conditions to which the mother is susceptible based on a low titer.

Rubella

Red-bell Rebellion

Rubella, also known as German measles, is a disease caused by the rubella virus. An infant with congenital rubella can present with a blueberry muffin rash, glaucoma, and pulmonary artery hypoplasia. The infected mother may have symptoms such as rash, low grade fever, cold-like symptoms and swollen glands.

Cytomegalovirus (CMV)

Side-toe-mega Virus

CMV infection or cytomegalic inclusion disease (CMID) during pregnancy can lead to miscarriage or stillbirth. Newborns with CMID present with IUGR and may be lethargic, have hypotonia, microcephaly, and experience seizures.

Herpes Simplex Virus (HSV)

Herpes-harp Virus

Herpes simplex virus infection can also be transmitted to the neonate by an infected mother. It most commonly occurs during delivery upon contact with HSV in the birth canal. It can present with a range of findings including a vesicular rash, mucosal involvement, seizures and sepsis.

Syphilis

Syphilis-Sisyphus

Syphilis is a spirochete bacterial infection that can also spread from an infected mother to the fetus. It can present with deformities of the nose and legs, including a saddle nose and saber legs, as well as blindness or deafness later in life.

Considerations

Diagnostic Testing

Diagnostic-computer Testing

Diagnostic testing is important when a TORCHeS infection is suspected. Most mothers are screened for rubella and syphilis during the first trimester. Other diagnostic tests should be added if there is clinical concern for a specific infection.