

Topic 2 ~ TOXOPLASMOSIS

It is caused by a protozoan *Toxoplasma gondii*.

Transmission:

- By eating raw or undercooked meat.
- Contact with infected cat faeces.
- Congenital transmission through transplacental transfer.

IMPLICATIONS FOR PREGNANCY

Pregnant Patient:

May remain asymptomatic or may show fatigue, myalgia and occasionally lymphadenopathy. Severe disease may cause deafness and mental retardation.

Fetus:

Maternal immunity protects against intrauterine fetal infection. The risk of fetal infection increases with duration of pregnancy. The virulence of fetal infection is greater if the infection is acquired early in pregnancy. 15% of primary maternal infection between 7th to 14th weeks of pregnancy results in fetal transmission and may cause fetal anomalies.

Newborn:

For congenital infection to develop, the woman must have acquired the infection during pregnancy. 75% of congenitally infected newborns are asymptomatic. Affected babies may express signs of disease, such as low birth weight, jaundice, anaemia, hepatosplenomegaly, convulsions, intracranial calcifications, hydrocephaly, microcephaly and eventually chorioretinitis.

Diagnosis:

- Toxoplasma screen is not part of routine antenatal screen but should be offered to women at risk.
- Diagnosis is established by showing specific IgM or rising IgG titre. Titres greater than 1:512 indicate current infection
- IgM may persist for years.
- Presence of IgG antibody before pregnancy imparts immunity to the woman.
- IgG avidity test determines time of maternal infection.
- Fetal infection is diagnosed by PCR on fetal tissue/amniotic fluid.

Antenatal Sonographic Features of Fetal Infection:

- Fetal calcification.
- Hyper echogenic bowel.
- Hydrocephaly/microcephaly.
- Hydrops.

Treatment:

Administration of Spiramycin, Sulfadiazine, Pyrimethamine and Sulphonamides during pregnancy significantly reduce the risk of fetal infection.