

CMV

Transmission can occur following primary or recurrent maternal infection

ANTENATAL DIAGNOSIS

Indications for testing mother

- Intrauterine growth retardation (IUGR)
- Fetal hydrops
- Maternal HIV

Maternal tests

CMV IgM

- A negative result excludes current infection
- A positive result is significant of recent infection only if there is a rise during pregnancy – look at IgG avidity (titre) from two specimens >10 days apart

Ultrasound

Features include:

- Intrauterine growth retardation (IUGR)
- Hydrocephalus (ventricular dilation), intracranial calcification, microcephaly
- Ascites, hydrops fetalis
- Pleural or pericardial effusions
- Oligo- or polyhydramnios
- Hepatomegaly
- Abdominal calcification
- Pseudomeconium ileus
- Thickened placenta

INFANT DIAGNOSIS

Main clinical signs

- Small for gestational age
- Petechiae/purpura
- Hepatosplenomegaly
- Jaundice
- Pneumonia

Investigation results

- CMV IgM positive
- CMV PCR urine positive
- Haemolytic anaemia
- Thrombocytopenia
- Conjugated hyperbilirubinaemia
- Raised liver enzymes
- Repeat maternal or baby's HIV antibody test

If any of above results is positive, continue with further investigations

FURTHER INVESTIGATIONS

- **CSF**
 - raised CSF protein
- **Ophthalmology**
 - chorioretinitis
- **Audiology**
 - sensorineural hearing loss
- **Head US**
 - hydrocephalus, cysts

- **CT of brain**
- intracranial calcification
- ventriculomegaly
- cerebral atrophy

TREATMENT

Asymptomatic (CMV IgM or PCR positive)

- Seek expert advice from paediatric infectious disease specialist regarding offering valganciclovir (possibly as part of an on-going international trial)
- advantages – reduced risk of deafness
- disadvantages – immunosuppression

Symptomatic

- IV ganciclovir 6 mg/kg 12 hrly over 1 hour prepared by pharmacy (cytotoxic) for 6 weeks (discuss with specialist in paediatric infectious diseases)

FEEDING

- Do not discourage infected women from breastfeeding their own uninfected, term infants – CMV can be transmitted via breastfeeding, but benefits of feeding outweigh risks posed by breast feeding as a source of transmission
- Avoid breastfeeding of premature neonates if the mother is positive and the baby asymptomatic