Assessment and Management of congenital Cytomegalovirus (cCMV)

If Positive Saliva CMV PCR:

- Send Urine CMV PCR before 21 days of life (Qualitative PCR will suffice)
- May use urine bag, but not cotton balls or gauze as it can inhibit PCR reaction.
- Consider consulting Infectious Disease Specialist
  https://www.vdh.virginia.gov/content/uploads/sites/109/2020/08/EHDI-cCMV-contacts-v3.pdf

If Positive Urine CMV PCR:

Perform all of the following tests before 30 days* of age to evaluate further for evidence/extent of cCMV disease:

- CBC with differential and platelets
- Liver function panel with T/D bilirubin
- Pediatric Ophthalmology dilated retinal exam within 2-3 wks of life
- Head Ultrasound
- Hearing Diagnostic Evaluation (diagnostic ABR)

**Consideration is for treatment to be initiated by 30 days of age.*

ASYMPTOMATIC if all of:

- Normal ophthalmology exam
- Normal ABR
- Normal Head Ultrasound
- Normal platelet count
- No Hepatosplenomegaly
- Normal liver function

By 3 months of age Refer to Audiology for routine diagnostic audiological testing.

Recommended Intervals:

Every 3 months until age 12 months
Every 6 months until age 6 years
Every year thereafter

These recommendations are for outpatient cCMV testing.

Isolated Sensorineural Hearing Loss

Before 30 Days of age:

- Refer to Infectious Disease to discuss antiviral treatment.
- Refer to Otolaryngology.
- Refer to Audiology for routine diagnostic audiologic evaluation.
- Refer to Neurology if abnormal HUS or continued microcephaly.

SYMPTOMATIC if ≥ 1 of:

- Thrombocytopenia
- Hepatomegaly
- Splenomegaly
- Intrauterine Growth Restriction (IUGR) or Small for Gestational Age (SGA)
- Microcephaly
- Abnormal Head Ultrasound (HUS)
- Hepatitis
- With or without Sensorineural Hearing Loss

Long Term Monitoring:

- Routine vision screening
- Monitor speech, language and other developmental milestones.
- Referral to Early Intervention

References:

Park AH. Outcomes from an Expanded Targeted Early Cytomegalovirus Testing Program. J Ped Infect Dis. (2020) 15(04): 189-194 DOI: 10.1055/s-0040-1709159.

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NS50 | 09-21