# **Newborn Targeted CMV Screening Protocol**

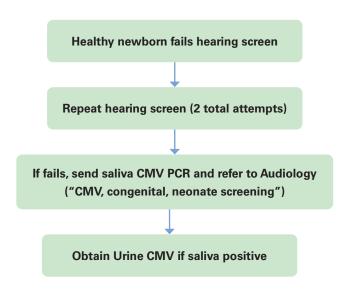
## **Newborn Nursery**

#### **Obtain Urine CMV ALL high-risk infants:**

- IUGR\*\*
- Microcephaly\*\*
- Hepatosplenomegaly
- Chorioretinitis
- Neonatal seizures, abn neuro exam
- Petechiae
- Jaundice at birth
- Prenatal US cranial abnormalities
- High risk perinatal HIV exposure
- Concern for prenatal CMV infection

Also consider other possible congenital infections

\*see reverse side for additional info



#### **Urine CMV Positive**

- Audiology URGENT visit
- 2. Labs: CBC/Diff, CMP (LFTs and renal function)
- 3. Schedule Head US
- 4. Ophtho if abn head US
- 5. ID referral

#### If audiology confirms hearing loss:

- 1. Refer to ENT
- 2. Refer to optho
- 3. Valgan tbd by ID

#### **Urine CMV Negative**

No further testing. Keep routine Audiology appointment.

#### Follow-up:

- 1. Labs (while on VGCV):
  - ~ Weekly (first 2-4 weeks): CBC/diff, **CMP**
  - ~ 8 weeks then monthly thereafter
- 2. Audiology: 3mos, 6 mos then Q 6mo until 3yo
- 3. Ophtho exam: Q 12 mos if CNS disease (unless findings suggest shorter interval)
- 4. Careful neurodevelopmental exams at each WCC (referrals as indicated)



# Clinical Guideline



This guideline should not replace clinical judgment.

# **Newborn Targeted CMV Screening Protocol**

## **Newborn Nursery**

#### \*\* High risk Infants:

- IUGR = < 3%ile for weight for gestational age (Olson AAP curve)
- Microcephaly = < 3%ile for head circumference for gestational age

#### Positive CMV PCR (either saliva OR urine):

#### 1. Urgent ID referral

- Obtain urine cmv if saliva positive
- Send Epic referral for urgent ID appointment

#### 2. Urgent Audiology evaluation

- Send message to audiology pool
- "Urgent Audiology referral needed for CMV positive infant"
- Appointment will be made within the week

#### 3. If fails repeat Audiology evaluation, urgent ENT referral:

• Send referral to Kelley Dodson and Lauren Riggs

#### 4. Call CHoR Radiology to schedule Head Ultrasound

- Place Order in Epic
- Call radiology to schedule

#### 5. Place Ophthalmology referral (usual process okay)



# Congenital Cytomegalovirus Guideline **Executive Summary**

## Children's Hospital of Richmond at VCU Congenital Cytomegalovirus Workgroup

General Pediatrics Owner: Tiffany Kimbrough, MD

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### **Approved (June 2020)**

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#### References

Gantt S, Dionne F, Kozak FK, Goshen O, Goldbarb DM, Park AH, et al. Cost-effectiveness of universal and targeted newborn screening for congenital cytomegalovirus infection. JAMA Pediatr. 2016 Dec 1; 170 (12): 1173-80.

Bergevin A, Zick CD, McVicar SB, Park AH. Cost-benefit analysis of targeted hearing directed early testing for congenital cytomegalovirus infection. Int J Pediatr Otorhinolaryngol. 2015 Dec, 79(12): 2090-3.

#### Citation

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Example:

Children's Hospital of Richmond at VCU, Kimbrough T, Dodson K, Marshall B. Congenital Cytomegalovirus Guideline. Available from: http://www.chrichmond.org/clinical-guideline-Congenital-Cytomegalovirus

