

PRACTICAL PEARL: Congenital Cytomegalovirus (CMV) Infection

INTRODUCTION	<ul style="list-style-type: none"> • Maternal to infant transmission of CMV is the most common perinatal infection worldwide. While most infants remain asymptomatic, potential morbidity can occur with early and late manifestations including progression of sensorineural hearing loss • Targeted screening in the newborn period may identify newborns at risk for progressive childhood hearing loss. • Oral treatment with valganciclovir may prevent ongoing hearing loss, and poor neurologic outcomes in some babies with other neurologic symptoms of CMV infection http://www.nejm.org/doi/full/10.1056/NEJMoa1404599
INITIAL EVALUATION AND MANAGEMENT BY PRIMARY CARE	<ul style="list-style-type: none"> • Newborn screening for congenital CMV can be done in the nursery on infants who “refer” on newborn hearing screen http://pediatrics.aappublications.org/content/139/2/e20162128.long • Testing is typically done on a single specimen by urine PCR or saliva PCR (instead of the traditional urine viral cultures for CMV. This is now orderable in CIS by primary nursery attendings, residents and nurses • A head ultrasound is recommended as soon as possible after positive CMV screening, as well as baseline CBC with diff, and LFTs, BUN and creatinine • Will also need immediate re-testing with pediatric audiology scheduled
WHEN TO REFER	<ul style="list-style-type: none"> • Positive CMV PCR test in first month of life and/or any “refer” on audiologic exams, or other CNS signs and clinical symptoms noted (microcephaly, petechiae, persistent low platelets)
HOW TO REFER	<ul style="list-style-type: none"> • Call 794-KIDS to contact the Pediatric Infectious Diseases division to arrange an appointment <i>within one week</i> of positive CMV result
WHAT TO EXPECT FROM BAYSTATE CHILDREN'S HOSPITAL VISIT	<ul style="list-style-type: none"> • Clinical evaluation by Pedi ID that may lead to further assessment for possible treatment and follow-up intervention: May include other virologic testing • Coordination of care for ophthalmology retinal exam and neurology and frequent follow-up with audiology every 3 months on first year of life • Possible ENT referral for other audiologic evaluation

Author: **Donna Fisher, MD**
Pediatric Infectious Disease
December 2017

Contact: Baystatechildren'shospital@baystatehealth.org