

ANMC Pediatrics Statement on Dexamethasone and Hearing Screening in Meningitis

In recent years, *Haemophilus influenzae* type a (Hia) meningitis has been more common than other causes of bacterial meningitis in children admitted to ANMC Inpatient Pediatrics. There have been multiple cases of sensorineural hearing loss associated with Hia meningitis.

The pattern of disease in Hia is similar to that seen in *Haemophilus influenzae* type b (Hib) meningitis. In Hib meningitis, dexamethasone has been shown to decrease the incidence of severe hearing loss. It is suspected that dexamethasone may confer similar benefits in Hia meningitis.

Recommendations for Dexamethasone Use:

- In the case of clinical meningitis or visibly purulent spinal fluid in children >6 weeks old, administer dexamethasone IV 0.15mg/kg/dose 10-20 minutes *prior to or at the same time as the first dose of antibiotics*.
- Do *not* give dexamethasone if antibiotics have already been given. This has not been shown to improve patient outcomes.
- If dexamethasone is initiated, continue dexamethasone IV 0.15mg/kg/dose every 6 hours until:
 - Pathogen other than Hia or Hib identified on gram stain/culture/PCR => stop dexamethasone.
 - Gram stain/CSF culture/PCR negative for bacterial meningitis => stop dexamethasone.
 - Hia or Hib identified => continue for total 2-4 days of dexamethasone therapy

Recommendations for Hearing Screening Following Meningitis:

- All children with bacterial meningitis should be referred to audiology. Hearing evaluation should be scheduled one month after hospital discharge.

Approved by ANMC Inpatient Pediatrics, PICU, Pharmacy, Infectious Disease.

Approved by ANMC MCH CCBG 2/4/2020