

Clinical Resource

Dexamethasone in Meningitis

The following is adapted from the "ANMC Pediatrics Statement on Dexamethasone and Hearing Screening in Meningitis," dated 2/4/20.

Haemophilus influenzae type A

In recent years, *Haemophilus influenzae* type A (HiA) meningitis has been more common than other causes of bacterial meningitis in children admitted to ANMC. Many of these children have been transferred from YKHC. See this <u>State Epidemiology Bulletin</u> for information about Alaska cases in 2014-2018, including the outbreak in 2018.

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. In Alaska, there have been multiple cases of sensorineural hearing loss associated with HiA meningitis. It is suspected that dexamethasone may confer similar benefits in HiA meningitis. As a result, our local experts (including infectious disease and endocrinology experts) recommend giving dexamethasone with all cases of suspected bacterial meningitis.

Dexamethasone

- Indications: A child >6 weeks old with clinical meningitis or visibly purulent spinal fluid.
- <u>Timing</u>: First dose should be given 10-20 minutes prior to or concurrent with the first dose of antibiotics; if given after antibiotics have been given, there is no evidence that dexamethasone will improve outcomes.
- Dose: Dexamethasone 0.15 mg/kg/dose IV.
- <u>Course</u>: If dexamethasone is initiated and HiA/HiB is confirmed, continue dexamethasone 0.15 mg/kg/dose IV Q6h for 2-4 days. If CSF culture/PCR show a different pathogen or are negative, stop the dexamethasone.

Hearing Screening

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

This resource is designed for the general use of most patients but may need to be adapted to meet the special needs of a specific patient as determined by the medical practitioner.

Approved by MSEC 4/6/21.

If comments about this guideline, please contact Leslie_Herrmann@ykhc.org