INFANTILE BOTULISM



Patients at risk: Age <12 mo Exposure to soil (construction sites) Eating honey



Signs & Symptoms: Constipation Poor feeding Weak cry Respiratory distress Drooling

Differential dx: Sepsis Dehydration Electrolyte abnormalities Myasthenia Gravis CNS pathology

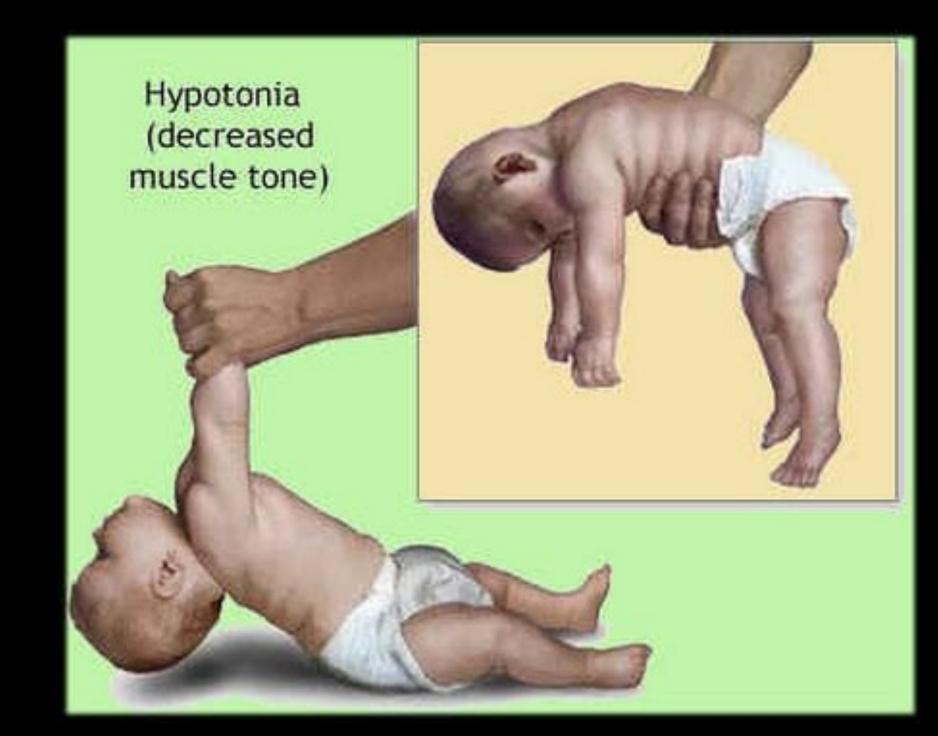
Physical exam: Stable vital signs Bulbar weakness —> generalized hypotonia Normal mental status

Bulbar Palsy

A lower motor neuron lesion of cranial nerves IX,X XI and XII

It causes difficulty:

- swallowing
- chewing
- speaking
- handling of secretions



ED management: R/o other diagnoses Airway protection if respiratory symptoms present Monitor for gag reflex IV access for hydration +/- NG tube for feeding



INTERNATIONAL EMERGENCY MEDICINE EDUCATION

Pediatric Pearls

PEDIATRIC TUBE SIZES

CALCULATE ENDOTRACHEAL TUBE (ETT) SIZE $[Age \div 4] + 4$

There are many formulas to calculate the endotracheal tube size for kids. The given formula is one of the most common. Let's think a six yo patient. Your ETT size is 6/4 = 1.5, and +4 = 5.5

NASOGASTRIC/OROGASTRIC TUBE OR FOLEY CATHETER SIZE ETT x 2

NG/OG tubes and Foley catheters are measured as FRENCH. (Fr) If your ETT size is 5.5, then your NG/OG and Foley sizes will be $5.5 \times 2 = 11$ Fr.

HOW DEEP YOUR ETT SHOULD BE ETT x 3

CHEST TUBE SIZE ETT x 4

If your calculated tube size is 5.5, your depth should be 5.5 x 3 = 16.5 cm. So, 16.5 cm mark should be seen at the level of central incisors.

If the same six yo patient needs a chest tube, your chest tube size is $5.5 \times 4 = 22$ Fr. By the way, this is mainly for trauma. Moreover, do not forget, smaller size tubes can work as same as big ones.



Tama's Tips

Treatment: Supportive care Contact DOH "Baby BIG" Botulism IG 50mg/kg x 1 dose

- Consider botulism in a pt <1 yo who just wont "perk up" no matter what you do for them.
 - Place an NG tube for feeding/hydration if difficult IV access.
 - If no gag reflex present, intubate for airway protection.
 - It is more common than you think.
 - Tama's tally of botulism pts in SI: 5

