Sugarloaf 2019

The Crumping Crouper

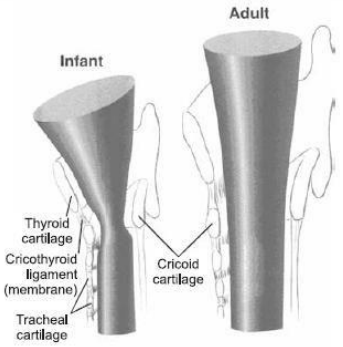
by Michael Ferguson

Objectives

1. Gain an appreciation for why children get croup
2. Have a differential diagnosis for upper airway obstruction
3. Have an algorithmic approach to croup management

Funnel Shaped Airway; narrowest part is subglottic

Figure 1. Comparison Of Infant And Adult Airway



From: Henretig, et al. Textbook of Pediatric Emergency Procedures

Treatment for Croup

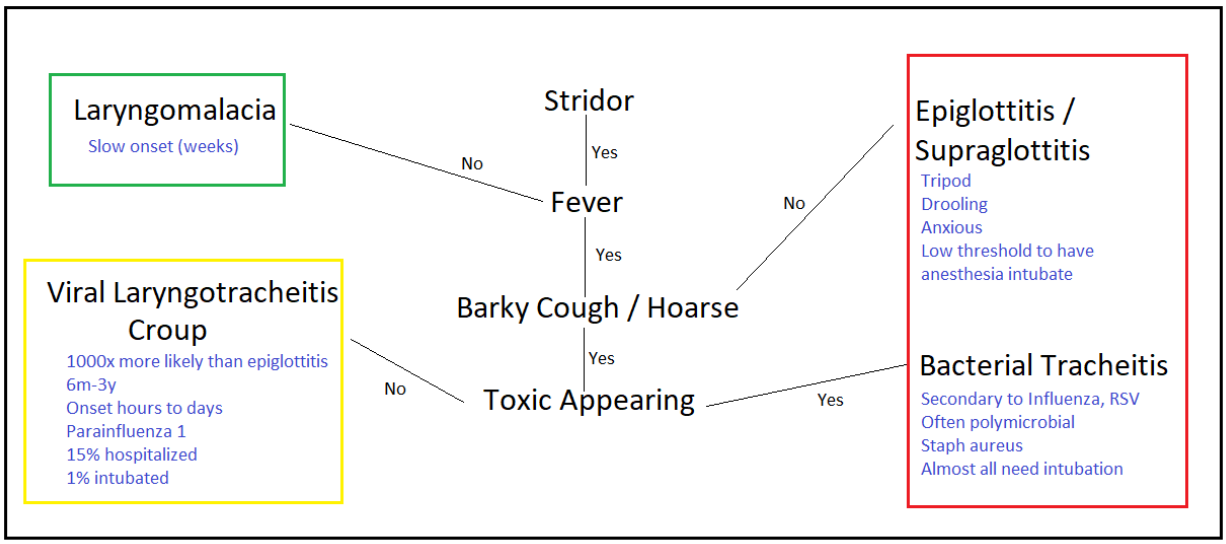
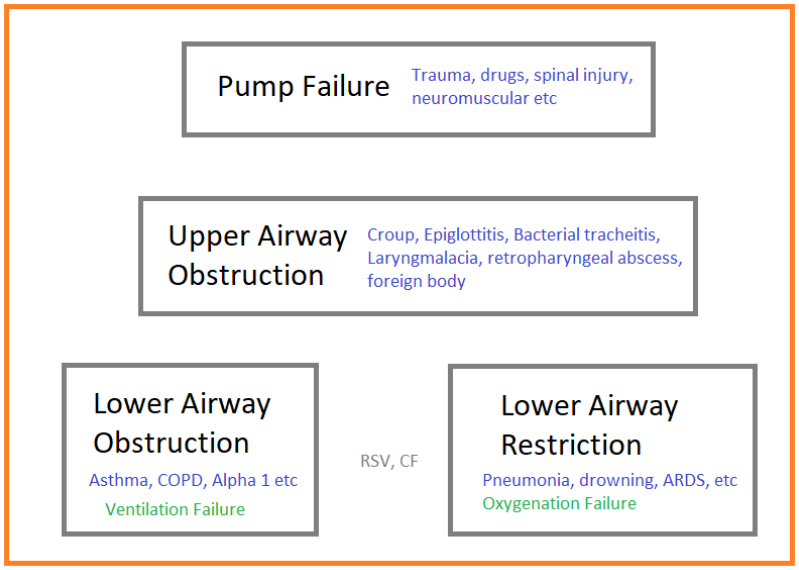
- Racemic epinephrine
  - Can use every 15 minutes if needed
  - Can make your own with 1:1000
- Steroids
  - Oral/IV/IM all the same
  - Dexamethasone 0.6mg/kg is preferred due to longer halflife
- Heliox
  - 80/20 or 70/30 only

Signs of impending failure

- Severe WOB at rest
- Anxiety?
- Somnolence
- Hypoxia / High oxygen requirement

Intubation

- Do everything you can not to.
- Have back-up
    - Anesthesia is the preferred first look
        - Consider an OR intubation
        - Consider ENT and/or surgical airway back up
- Think about tube size / cuff
- When you paralyze, you may completely lose the airway



Types of respiratory failure