Stridor / Croup / Epiglottitis (Pediatric)

CFR and All Provider Levels

1. ABCs and vital signs
2. Airway management
3. Administer high concentration blow-by oxygen (humidified, if available) delivered by nasal cannula or face mask held 3-5 inches from face, as tolerated
4. Assess and treat for an obstructed airway as needed
5. Assess and treat for anaphylaxis as needed
6. Assess and treat for respiratory distress/respiratory failure, or shock as needed

CFR STOP

EMT

7. Request ALS assistance if the patient is unconscious
8. Transport

EMT STOP

Paramedic

9. For a child with stridor at rest, administer Epinephrine as follows:
    - OPTION A: L-Epinephrine 3 mg (3 ml of a 1:1,000 concentration) nebulized
    - OPTION B: 2.25% Racemic Epinephrine 0.5 ml mixed with 3 ml Normal Saline nebulized
10. Obtain intravascular access
11. For pediatric patients age ≥ 2 years, administer one of the following medications for ANY of the following conditions: stridor at rest, respiratory distress, or persistent barky cough:
    - OPTION A: Dexamethasone 0.6 mg/kg IV/IM/PO (maximum 12 mg)
    - OPTION B: Methylprednisolone 1 mg/kg IV/IM (maximum 60 mg)
12. If there is clinical concern for Epiglottitis, do NOT attempt advanced airway management and ventilate using a bag valve mask

Paramedic STOP

Medical Control Options

13. For pediatric patients age < 2 years, administer one of the following medications for ANY of the following conditions: stridor at rest, respiratory distress, or persistent barky cough:
    - OPTION A: Dexamethasone 0.6 mg/kg IV/IM/PO (maximum 12 mg)
    - OPTION B: Methylprednisolone 1 mg/kg IV/IM (maximum 60 mg)

Key Points / Considerations

- Croup should be suspected in a child with stridor, retractions, barking cough, normal or slightly elevated temperature, sternal retractions, or a history of upper respiratory infection
- Epiglottitis should be suspected in a child with stridor, retractions, muffled voice, high fever, tripod position, or drooling, and toxic appearance
- Avoid agitating the child, particularly if there is concern for epiglottitis or upper airway edema
- If the patient has inspiratory stridor, it is often an upper airway problem (physiologic or mechanical obstruction)
- Unvaccinated children are at higher risk of epiglottitis and a vaccination history should be obtained
- IV formulation of Dexamethasone may be administered orally (PO)
- Administration of steroids via IV shall be performed slowly over 2 minutes
- When administering steroids to pediatric patients, Dexamethasone is preferred over Methylprednisolone