Clinical Guideline
Croup
Pediatric Emergency & Hospital Medicine

This guideline should not replace clinical judgment.

Inclusion criteria:
- 6 months to 6 years of age
- Clinical diagnosis of Croup

Exclusion criteria:
- Toxic appearance
- Underimmunized
- Severely immunocompromised or neutropenic
- Known airway abnormality
- History of intubation
- Asymmetry of respiratory exam
- Neuromuscular disease or hypotonia

Is stridor at rest plus one or more of the following present:
- Hypoxia (SpO2 <90%)
- Moderate Work of Breathing
- Frequent Barky cough
- Tachypnea
- Agitation

Signs of impending respiratory failure:
- Decreased LOC
- Severe anxiety/ Listlessness
- Poor air movement
- Severe respiratory distress
- Cyanosis

Off pathway
Treat as a medical emergency

Discharge criteria:
- At least 3 hours since racemic epinephrine
- No stridor at rest
- Demonstrated PO fluid intake
- Good air movement
- Minimal to no work of breathing
- Effective family education
- Adequate outpatient follow up

Mild
Dexamethasone 0.6 mg/kg PO (max 16 mg)

Moderate to severe
Dexamethasone 0.6 mg/kg PO/IM/IV (max 16 mg)
+ Racemic Epinephrine 2.25% (0.5 mL), diluted in 3 mL NS and nebulized for inhalation

Reassess: Is stridor at rest plus one or more of the following present:
- Hypoxia (SpO2 <90%)
- Moderate work of breathing
- Frequent barky cough
- Tachypnea
- Agitation

Observe in the Pediatric Clinical Decision Unit or admit to pediatric floor
- May give additional racemic epinephrine doses for rebound stridor
- Contact/Droplet Precautions

Repeat racemic epinephrine

Reassess: Is stridor at rest plus one or more of the following present:
- Hypoxia (SpO2 <90%)
- Moderate work of breathing
- Frequent barky cough
- Tachypnea
- Agitation

Escalate care
- Repeat racemic epinephrine
- Consider additional work up
- Consider ENT and/or PICU consult
- Admit to appropriate level of care

Treatment considerations:
- RSV/Flu PCR (if in season and febrile)

NOT routinely recommended:
- Respiratory pathogen panel
- X-rays
- Repeat dexamethasone
- Cool mist

For questions concerning this guideline, contact: chorclinicalguidelines@vcuhealth.org

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Croup Guideline

Executive Summary

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Approved (August 2018)

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References


Citation

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Example:
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