Diagnosis of viral Bronchiolitis should be clinical
No PCR, Chest X-ray, or other labs needed

- Judicious Suctioning
  - Evaluate need for suctioning prior to feeding
  - Prior to respiratory assessments
  - Avoid suctioning “deep” (beyond nasopharynx)
- Oxygen Therapy for Sats < 90% (Saturation q 4 hrs with vitals, no continuous measurements.
  - Keep sats between 90-94%
- Adequate Hydration
  - Consider NG tube for hydration and nutrition

- May consider 3%. Saline via neb q 4 hrs for 24 hrs and reassess.
- No benefit of 3% saline in the ED

**Clinicians may consider nebulized 3% hypertonic saline to hospitalized patients based on weak evidence, however use of 3% nebulized hypertonic saline does not reduce length of stay in a recent multi-center study.**

- No benefit of albuterol, steroids, epinephrine, antibiotics, and chest physical therapy

If “Possible asthma” based on modified asthma predictive index (See page 2 for more info)

Consider SABA (Albuterol):
RT will assess bronchiolitis score before and after treatment.
- If score is 3 or less prior to treatment, and no significant change after, consider stopping Albuterol
Reassess,
- If there is response to Albuterol consider adding Prednisolone or Methylprednisolone

For persistent secretions, consider discharge home with bulb suction, NoseFrida, or acorn.

Notes:
- Chest physiotherapy does not improve the severity, respiratory parameters, or reduce length of hospital stay or oxygen requirements in hospitalized infants with acute bronchiolitis not on mechanical ventilation.
- Ipratropium Bromide (Atrovent) has not been shown to improve the course for bronchiolitis
- Levalbuterol (Xopenex) was included in one study for mechanically ventilated patients with RSV/Bronchiolitis. Although inspiratory resistance fell after all treatments, heart rate rose significantly; benefit small with questionable value.
- Pulmicort has not been shown to improve either short term or long term outcomes.
**Management of Viral Bronchiolitis.**

Guidelines approved by the 2014 ACH-OL Bronchiolitis Best Practice Committee

(Based on AAP Guidelines 2014)

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**Modified Asthma Predictive Index**

1. A history of 4 or more wheezing episodes with at least one physician diagnosed
2. MD-diagnosed atopic dermatitis
3. Allergic sensitization to at least one aeroallergen

<table>
<thead>
<tr>
<th>Major Criteria</th>
<th>Minor Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental history of asthma</td>
<td>1. Wheezing unrelated to colds</td>
</tr>
<tr>
<td>2. MD-diagnosed atopic dermatitis</td>
<td>2. Blood eosinophils above 4%</td>
</tr>
<tr>
<td>3. Allergic sensitization to at least one aeroallergen</td>
<td>3. Allergic sensitization to milk, egg, or peanuts</td>
</tr>
</tbody>
</table>

**Bronchiolitis Scoring System**

<table>
<thead>
<tr>
<th>Variable</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I:E Ratio</td>
<td>Less or equal to 1:2</td>
<td>≥1:3</td>
<td></td>
</tr>
<tr>
<td>Respiratory Rate &lt; 2 years</td>
<td>&lt; 49</td>
<td>≥ 50</td>
<td></td>
</tr>
<tr>
<td>Accessory Muscle Use</td>
<td>none</td>
<td>Retractions intercostal substernal subcostal</td>
<td>Neck or abdominal muscles</td>
</tr>
<tr>
<td>Wheezes</td>
<td>normal breath sounds or end expiratory</td>
<td>Entire expiratory</td>
<td>Entire expiration and inspiration</td>
</tr>
<tr>
<td>Air exchange</td>
<td>normal</td>
<td>Localized decreased</td>
<td>Multi areas decreased</td>
</tr>
</tbody>
</table>

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**Summary of Bronchiolitis Scoring System**

1. Scoring is assessed by RCPs post-suction
2. Consider nebs if score of ≥ 3
3. A decrease in score of ≥2 is considered significant improvement, suggestive of continuing inhaled treatments (task-force consensus 2011).
4. If pre-treatment score <3, nebs are not indicated.

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**References**