**Terbutaline Pathway**

Load with 5 mcg/kg Terbutaline IV  
Start infusion at 0.5 mcg/kg/min  
(max 6 mcg/kg/min)

Assess asthma score and heart rate Q1 hr

- **Asthma score ≥ 10 and Hr < max**
  - Increase infusion by 0.5 mcg/kg/min

- **Asthma score < 10**
  - No change in infusion rate

**Plateau Phase**

- **Asthma score > 12**
  - Assess asthma score Q1hr

- **Asthma score < 12 x 6 hrs**

**Weaning Phase**

- **Asthma score < 10**
  - Decrease infusion by 0.5 mcg/kg/min  
  - Assess asthma score Q1 hr

- **Asthma score 10-12**
  - No change in infusion rate  
  - Assess asthma score Q1hr

- **Asthma score > 12**
  - Increase infusion by 0.5 mcg/kg/min  
  - Suspend weaning for 2 hrs  
  - Assess asthma score Q1hr

*Heart Rate Max  
Age <3 = 200  
Age 3-10 = 180  
Age >10 = 160

Last updated 10-22-21  
Approved by P&T Committee 10-19-21
## Pediatric Asthma Score

<table>
<thead>
<tr>
<th>Asthma Severity</th>
<th>Normal</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS</td>
<td>0-4</td>
<td>5-7</td>
<td>8-11</td>
<td>12-15</td>
</tr>
<tr>
<td>Scoring Factors</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Respiratory Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 years</td>
<td>18-26</td>
<td>27-34</td>
<td>35-39</td>
<td>≥40</td>
</tr>
<tr>
<td>4-5 years</td>
<td>16-24</td>
<td>25-30</td>
<td>31-31</td>
<td>≥36</td>
</tr>
<tr>
<td>6-12 years</td>
<td>14-20</td>
<td>21-26</td>
<td>27-30</td>
<td>≥31</td>
</tr>
<tr>
<td>&gt;12 years</td>
<td>12-18</td>
<td>19-23</td>
<td>24-27</td>
<td>≥28</td>
</tr>
<tr>
<td>Oxygen Saturation (SpO2)</td>
<td>&gt;98% on room air</td>
<td>95% to 97% on room air</td>
<td>90% to 94% on room air</td>
<td>&lt;90% on room air or on any oxygen</td>
</tr>
<tr>
<td>Auscultation</td>
<td>Normal breath sounds with good aeration throughout</td>
<td>End expiratory wheezing only</td>
<td>Expiratory wheezing</td>
<td>Inspiratory and expiratory wheezing to diminished breath sounds</td>
</tr>
<tr>
<td>Retractions</td>
<td>None</td>
<td>Intercostal</td>
<td>Intercostal and substernal</td>
<td>Intercostal, substernal and supraclavicular</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>Speaks in complete sentences</td>
<td>Speaks in short sentences</td>
<td>Speaks in partial sentences, short cry</td>
<td>Speaks in single words, short phrases/grunting</td>
</tr>
</tbody>
</table>
Contributing Members

Dr. Abdallah Dalabih, Critical Care Medicine
Dr. Ron Sanders, Critical Care Medicine
Dr, Matt Malone, Critical Care Medicine
Clint Layes, Pharm D., Pharmacy
Emily Rader, Manager Clinical Effectiveness & Outcomes

Metrics

1. Pathway compliance
2. Pediatric ICU length of stay
3. Length of medication (terbutaline) use
4. Cost of medication use (what does this mean? Does it fluctuate?)
References