**Acute Asthma Treatment**

**GOAL:**
Recognize asthma exacerbation early, and provide appropriate education and treatment before symptoms worsen and require ED or inpatient care.

**OBJECTIVES:**
1. Reverse hypoxia
2. Reverse airway obstruction rapidly
3. Reduce short-term relapse

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**Inclusion Criteria:**
- Age > 1 Year
- Dyspnea (tachypnea in young children) in patient with known or suspected asthma.

**Exclusion Criteria:**
- Other acute primary respiratory diagnosis including pneumonia, croup, bronchiolitis
- Children with other chronic disease such as CF, congenital heart or pulmonary disease, immune disorder
- Unilateral wheeze suggestive of foreign body

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**Mild symptoms**
- Dyspnea with activity only
- End-expiratory wheeze
- No or mild work of breathing (only intercostal/subcostal retractions)
- No tachycardia
- Equiv to SCH Respiratory Score (RS) 1-5
- PEF >80%

**OBJECTIVES:**
- Give Albuterol MDI 4 puffs
- Observe response at 30 minutes

**Assess Symptom Severity**
- Consider oral steroid based on patient history of asthma severity, control and likelihood to progress to more severe symptoms
- Not Improved

**Moderate symptoms**
- Dyspnea at rest
- Interfering with usual activity
- Expiratory wheeze heard throughout
- Mild work of breathing
- Mild tachycardia
- Equiv to SCH Respiratory Score 6-12
- PEF 50-79%

**Severe symptoms**
- Dyspnea at rest
- Interfering with talking
- Loud inspiratory and expiratory wheezes
- Moderate to severe work of breathing
- Moderate tachycardia
- Equiv to SCH Respiratory Score ≥ 13
- PEF ≤ 50%

**OBJECTIVES:**
- Place pulse oximeter and provide oxygen PRN to maintain SaO2 > 90%
- Call 911 for ambulance
- Give Albuterol MDI 8 puffs or Continuous nebulized Albuterol with Ipratropium 0.75 mg
- Give Dexamethasone 0.6 mg/kg (max 16 mg) PO within 60 minutes

**Assess Symptom Severity**
- Not Improved

**Severity Decrease / Stable**
- Give Albuterol MDI 4 puffs
- Observe response at 30 & 60 minutes

**DC to home with Albuterol 2-4 puffs Q 4 hours PRN and follow up PRN**

**Assess Symptom Severity**
- If safe for DC to home, provide second dose of Dexamethasone 0.6 mg/kg at 24 hours
- DC to home with Albuterol 2-4 puffs Q 4 hours x 24 hours, then PRN and follow up in 2 weeks

**Severe symptoms**
- If still Moderate at 60 mins, may repeat Albuterol MDI 8 puffs
- Observe response at 30 and 60 minutes