

Acute Bronchiolitis

1. Definition:
 - a. a disorder most commonly caused in infants by viral LRTI
 - b. it is the most common lower respiratory infection in this age group and is characterized by acute inflammation, edema and necrosis of epithelial cells lining small airways, increased mucus production, and bronchospasm
2. Symptoms:
 - a. a viral upper respiratory prodrome followed by increased respiratory effort and wheezing in children less than 2 years of age
 - b. rhinorrhea, cough, wheezing, tachypnea, and increased respiratory effort manifested as grunting, nasal flaring, and intercostal and/or subcostal retractions
3. Causes:
 - a. This is most commonly caused by respiratory syncytial virus (RSV).
 - b. Other viruses which may cause this illness include metapneumovirus, influenza, parainfluenza, coronavirus, adenovirus, and rhinovirus.
4. Risk Factors
 - a. Younger than 6 months old
 - b. Never having been breast-fed
 - c. Premature birth
 - d. An underlying heart or lung condition
 - e. A depressed immune system
 - f. Exposure to tobacco smoke
 - g. Contact with multiple children, such as in a child care setting
 - h. Living in a crowded environment
 - i. Having siblings who attend school or child care and bring home the infection
5. Complications
 - a. Cyanosis
 - b. Apnea
 - c. Dehydration
 - d. Fatigue and respiratory failure
6. Tests
 - a. Are they really needed?
 - i. CXR
 - ii. RSV nasal wash or swab
7. Treatment
 - a. Bronchodilators
 - i. Albuterol
 - ii. Epinephrine
 - b. Corticosteroids
 - c. Ribavirin

- d. Fluids
 - e. Chest physiotherapy
 - f. Supplemental oxygen
8. Prevention
- a. Palivizumab prophylaxis
 - b. Hand decontamination
 - c. Breastfeeding
 - d. Secondhand smoke