Bacterial Tracheitis
Pseudomembranous Croup

1. Epidemiology
   a. Affects older children than in croup (ages 1-6 years)

2. Etiology
   a. Staphylococcus aureus
   b. Streptococcal species
   c. Haemophilus influenzae type B (HiB)

3. Symptoms
   a. Very toxic appearance with rapid progression
   b. High fever
   c. Purulent sputum

4. Signs: Does not respond to croup therapies
   a. Unresponsive to Racemic Epinephrine or mist therapy

5. Differential Diagnosis
   a. Laryngo-tracheo Bronchitis (Croup)
   b. Epiglottitis
   c. Foreign Bodies
   d. Abscess

6. Radiology: Lateral Neck X-ray (only in the stable patient)
   a. Tracheal psuedomembrane
   b. Necrotic epithelium subdivides trachea lumen
   c. May reveal subglottic narrowing, clouding of tracheal air column, or irregular tracheal margin

7. Lab Studies
   a. Obtain bacterial culture and Gram stain of tracheal secretions
   b. Obtain blood cultures

8. Management
   a. Maintenance of an adequate airway is of primary importance
      i. Avoid agitating the child.
      ii. If the patient's respiratory status deteriorates, usually due to movement of the membrane, bag-valve-mask ventilation should be effective
   b. Antibiotics
      i. Ceftriaxone (Rocephin) 50-75mg/kg/day IV or IM
      ii. Cefuroxime (Ceftin) 50-100mg/kg/day IV or IM
   c. Some may require intubation
      i. Smaller ET Tube then usual