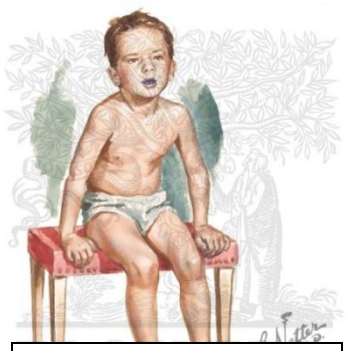
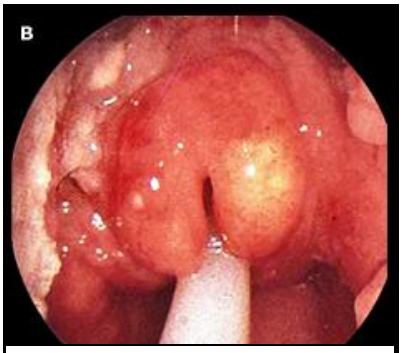
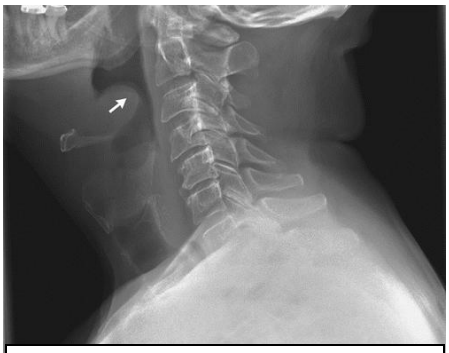
- **Epiglottitis:**
  - It is an acute inflammation and edema of epiglottis that is caused by Haemophilus influenza type-B (HIB) in children between 2-7 years. Nowadays it is rare, due to routine vaccination.
  - **Clinical features**: high-grade fever (because it is a bacterial infection), muffled speech, dysphagia with drooling and child sitting in tripod position with neck being hyperextended.
  - **Investigations**: CBC (shows leukocytosis), blood culture (positive if it is caused by HIB) and chest X-ray shows the (thumb sign). If visualized with bronchoscope: erythematous swollen epiglottis can be seen (but this is not done because airway obstruction and respiratory arrest can occur at any moment. This condition is a pediatric emergency).
  - **Management**: patient is intubated and given IV 3rd generation cephalosporins (ceftriaxone).



**Tripod position**

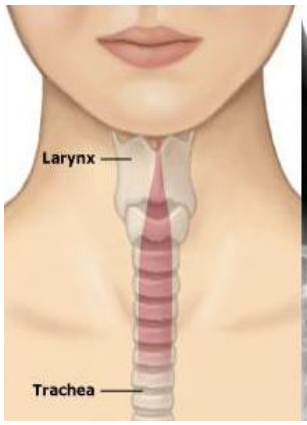


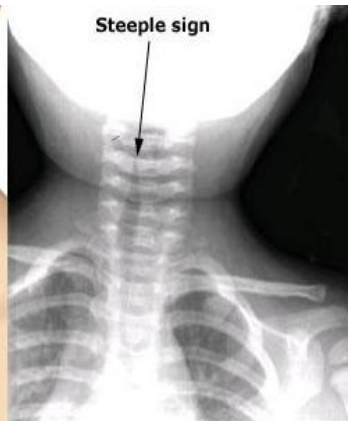

**Swollen epiglottis**

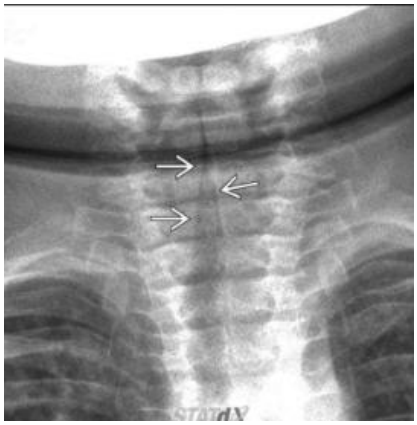


**Lateral x-ray showing thumb sign**

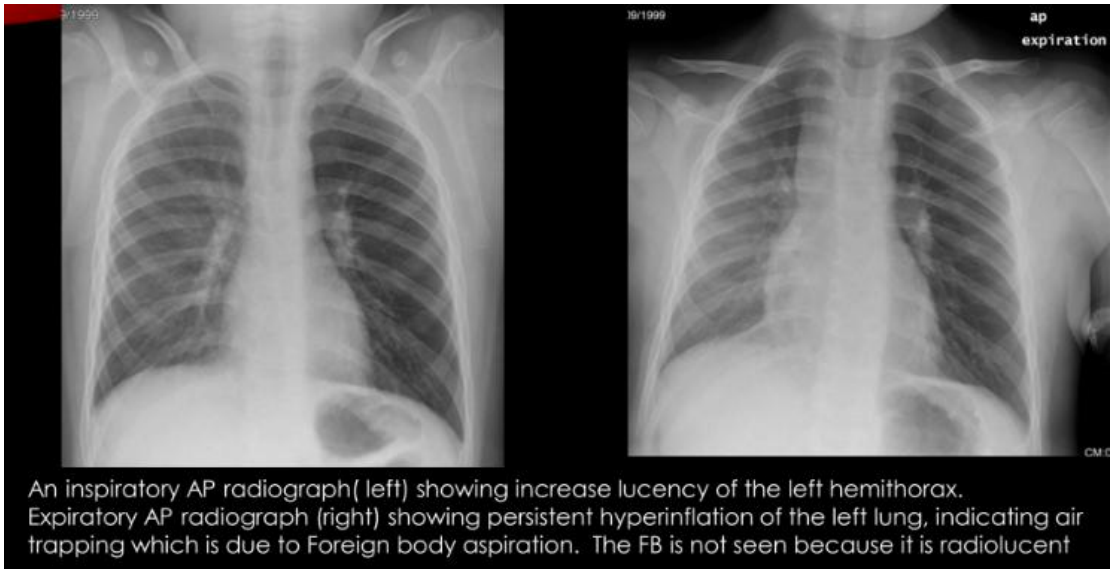
- **Croup:**
  - It is an inflammation of larynx, trachea and bronchi that occurs between ages of 3 months to 3 years and is most commonly caused by parainfluenza virus.
  - **Clinical features**: low-grade fever (because it is a viral infection), inspiratory stridor and barky cough.
  - **Investigations**: anterior-posterior view of neck X-ray will show the (steeple sign). It is also known as "pencil tip" or "inverted V" configuration.
  - **Management**: mainly supportive (cool mist and fluids). Hospitalization is only indicated for children in respiratory distress.



- **Foreign body aspiration:**
  - Aspiration of small objects that commonly occur between the age of 3 months to 5 years. Commonly aspirated objects include: nuts, medicine, popcorn, grapes and small toy parts.
  - **Clinical features**: history of chocking, inspiratory stridor with laryngotracheal foreign bodies, localized wheezing with bronchial foreign bodies (most commonly the right bronchi because it is shorter, less oblique with a wider diameter) and asymmetric air entry on auscultation.
  - **Investigations**: radiopaque objects appear in CXR only in 15% of cases! Therefore, you must have a high index of suspicion!
  - **Management**: BLS (don't do it if the child is fine because you might dislodge the foreign body); removal of the foreign body is done through rigid bronchoscopy.



An inspiratory AP radiograph( left) showing increase lucency of the left hemithorax. Expiratory AP radiograph (right) showing persistent hyperinflation of the left lung, indicating air trapping which is due to Foreign body aspiration. The FB is not seen because it is radiolucent