# Stridor

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# What is stridor?

- Sound produced when air travels through an obstructed upper airway
- Inspiratory stridor
  - Obstruction above the glottis
- Expiratory stridor
  - Obstruction in lower trachea
- Biphasic stridor
  - Glottic or sub-glottic lesion
- Total airway obstruction does not result in stridor

# Causes

- Congenital causes
  - Congenital laryngeal stridor
  - Laryngeal stenosis, webs, cyst
  - Vascular abnormalities
  - Vocal cord dysfunction
- Acquired causes
  - aspiration of a foreign body
  - Subglottic stenosis
  - Anaphylaxis

# Causes

- Acquired causes
  - bacterial tracheatis
  - Retropharyngeal abscess,
  - Peritonsillar abscess
  - Viral croup
  - Epiglottitis
  - Diphtheria
  - Tetanus

# History

- Onset and progression
  - Age of onset, duration, severity, and progression
- Precipitating events (eg, crying or feeding)
- Positioning (eg, prone, supine, or sitting)
- Quality and nature of crying ; presence of aphonia
- Other associated symptoms (eg, paroxysms of cough, aspiration, difficulty in feeding, drooling, history of reflux)

# History

- Birth and early neonatal history
  - Type of delivery (shoulder dystocia)
  - maternal condylomata,
  - endotracheal intubation use and duration
  - congenital anomalies
  - surgical history
- Developmental history
- History of color change, cyanosis, respiratory effort, and apnoea
- Growth, feeding, reflux

# Examination

- Acute
  - Degree of respiratory distress / exhaustion
  - Type of recessions
  - Cyanosis
  - Character of cough
- Chronic
  - Other anomalies
  - Growth

# Congenital laryngeal stridor

- 75%of all cases
- Due to laryngomalacia
- Aretenoids, epiglottis, aryepiglottic folds are sucked in on inspiration
- Stridor increases with URTI, agitation
- Does not need treatment unless
  - Poor weight gain
  - Severe obstruction
- Resolves by 2 years

# Croup

- Acute laryngotracheobronchitis of viral origin
- Parainfluenza virus is the commonest
- Common in 1- 2 years, coryzal symptoms followed by barking cough
- Hoarse voice, barking cough, loud harsh stridor, non toxic, fever <38.5° C

# Management

- Keep calm
- Steroids
- Adrenaline inhalation
- ventilation

# Epiglottitis

- An emergency
- Caused by *H. Influenzae*
- Commonest 2 -6 years
- Rapid onset, sore throat, toxic, ill, dysphagia resulting in drooling, high fever, irritable.
- Child sitting forward with neck extended
- Marked respiratory distress. Soft stridor

- *Now rare due to immunisation*

# Management

- Team of Paediatrician, ENT surgeon, anesthetist  is needed
- Air war management is the most important
- Never try to examine the throat
- Keep the child in most comfortable position with least disturbance
- 3rd generation cephalosporins
- Rifampicin 20mg/kg daily for 4 days for non immunised contacts

- https://www.youtube.com/watch?v=oeoAze-CHng
- https://www.youtube.com/watch?v=ANV_YPpr-MI
- https://www.youtube.com/watch?v=vkYrGQ1dIwQ

# QUESTIONS?