Foreign Bodies: Aero-digestive Tract

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Introduction

- Common problem
- Children, Psychotics, Pts in coma
- Asymptomatic or life threatening
- Shouldn’t be ignored with positive history
Aetiology

- **Age:** Children, playing while eating
- **Loss of protective mechanism**
  - Artificial denture
  - Coma
  - Epileptic seizure
  - Deep sleep
  - Alcoholic intoxication
- **Carelessness**
- **Oesophageal diseases**
- **Psychotics**
FB: Upper GI Tract

- Sites
  - Tonsil
  - Base of Tongue
  - Vallecula
  - Oesophagus
Foreign Bodies

- Tonsil
  - Sharp FB, fish bone or needle
  - Lodges in tonsillar crypt
  - Pt can easily localize FB
  - Oropharyngeal examination
  - Remove with forceps
Base of Tongue / Vallecula

- Fish bone or needle
- Mirror examination
- Don’t palpate
- Remove in the office
- May require GA in uncooperative pts
Pyriform Fossa

- Fish bone, chicken bones, mutton pieces, needle or denture
- Diagnosis by history & examination
- Removal under LA or GA
Oesophagus

- Fibromuscular tube 25 cms
- Three constrictions:
  - 15cms: Cricopharyngeal sphincter
  - 23cms: Aorta & Left main bronchus
  - 40cms: Lower oesophageal sphincter
- Two sphincters
- Oesophageal wall
  - Mucus membrane
  - Submucosa
  - Muscle
  - Fibrous layer
Clinical Features

- **Symptoms**
  - Choking or gapping
  - Discomfort or pain
  - Dysphagia
  - Drooling of saliva
  - Respiratory distress
  - Substernal or epigastric pain

- **Signs**
  - Tenderness
  - Pooling of secretions
  - FB in postcricoid area
Investigations

- Plain X – Ray
  - Lateral view of soft tissue Neck
  - Posteroanterior & Lateral view of Chest
  - Children: Nasopharynx to rectum
- Fluoroscopy
- Contrast studies
- MRI
Management

- General work up for PAC fitness
- Oesophagoscopic removal
- Cervical oesophagotomy
- Transthoracic oesophagotomy
Complications

- Respiratory obstruction
- Perioesophageal cellulitis
- Perforation
- Tracheo-oesophageal fistula
- Ulceration & fistula
DIFFICULT FOREIGN BODIES

- VEGETATIVE FOREIGN BODIES
- DENTURES
- OPEN SAFETY PINS
- SHARP FOREIGN BODIES
- SPHERICAL FOREIGN BODIES
- FOREIGN BODIES IN INFANTS
NEGLECTED FOREIGN BODIES

- INITIAL CONSERVATIVE MANAGEMENT WITH IV ANTIBIOTICS & STEROIDS FOR 24 TO 48 HRS
- FOLLOWED BY FOREIGN BODY REMOVAL UNDER GA
Foreign Bodies: Airway

- Foreign body aspirated can lodge in
  - Larynx
  - Trachea
  - Bronchi
- FB with sharp points can stick anywhere
Aetiology

- Children <4 yrs,
- Adults in coma, deep sleep, or alcoholic intoxication
- Loose teeth or denture

Type of Foreign body

- Exogenous
  - Non-irritating: pin, nails, plastic beads
  - Irritating: Peanuts, seds, beans, beetal nut etc

- Endogenous
  - Saliva, mucopus, vomitus, bile etc.
Clinical features

- H/o FB ingestion with violent cough
- Choking, gaging & cyanosis
- U/L or B/L wheezing
- Chronic cough
- Dyspnoea: intermittent or continuous
- Symptom free period
- Pneumonitis or atelectasis
- Obstructed emphysema
Investigations

- **General Investigations:**
  - For GA fitness

- **Specific investigations:**
  - To localize the foreign body.
    - Plain X-ray Soft tissue neck
    - Plain X-ray chest – PA & Lateral view
    - Bronchogram
Treatment

- Heimlich maneuver
- Direct Laryngoscopy
- Bronchoscopy