

# Foreign body Impaction & Chocking patient.

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# outline

- Introduction
- Common foreign bodies
- Areas of Impaction
- ED assessment and investigation
- Management & disposition.

# Introduction

- A foreign body (FB) is an object or substance foreign to the location where it is found.
- FB may be classified as animate (living) and inanimate (nonliving).
  - The inanimate FBs can further be classified as organic or inorganic
- The presence of FBs in the ENT region is one of the most common causes of otolaryngologic emergencies.

# Common foreign bodies

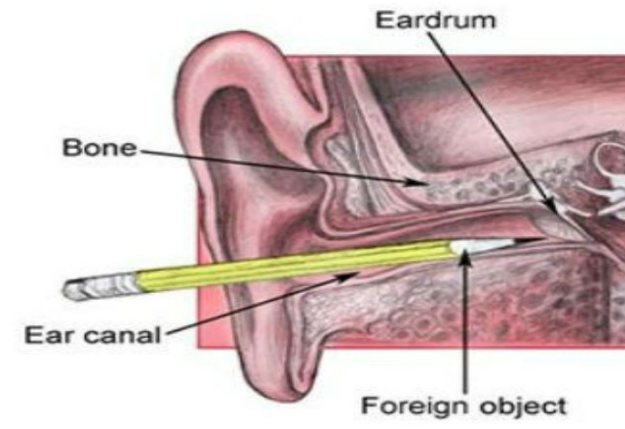
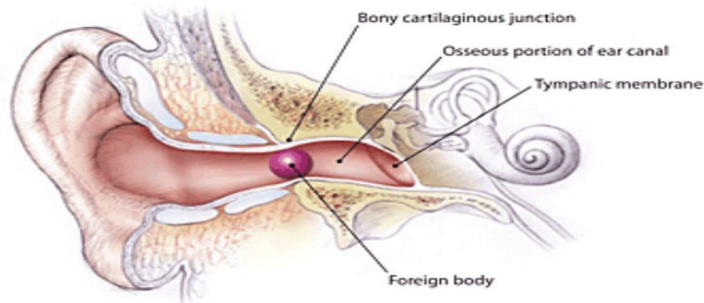
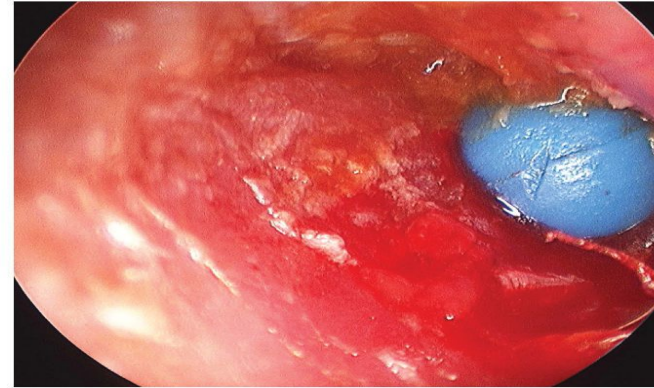
- Pebbles
- Slate pencils
- Beads
- marbles
- peas
- Beans
- nuts
- button batteries
- paper wads
- Buttons



# Areas of impaction

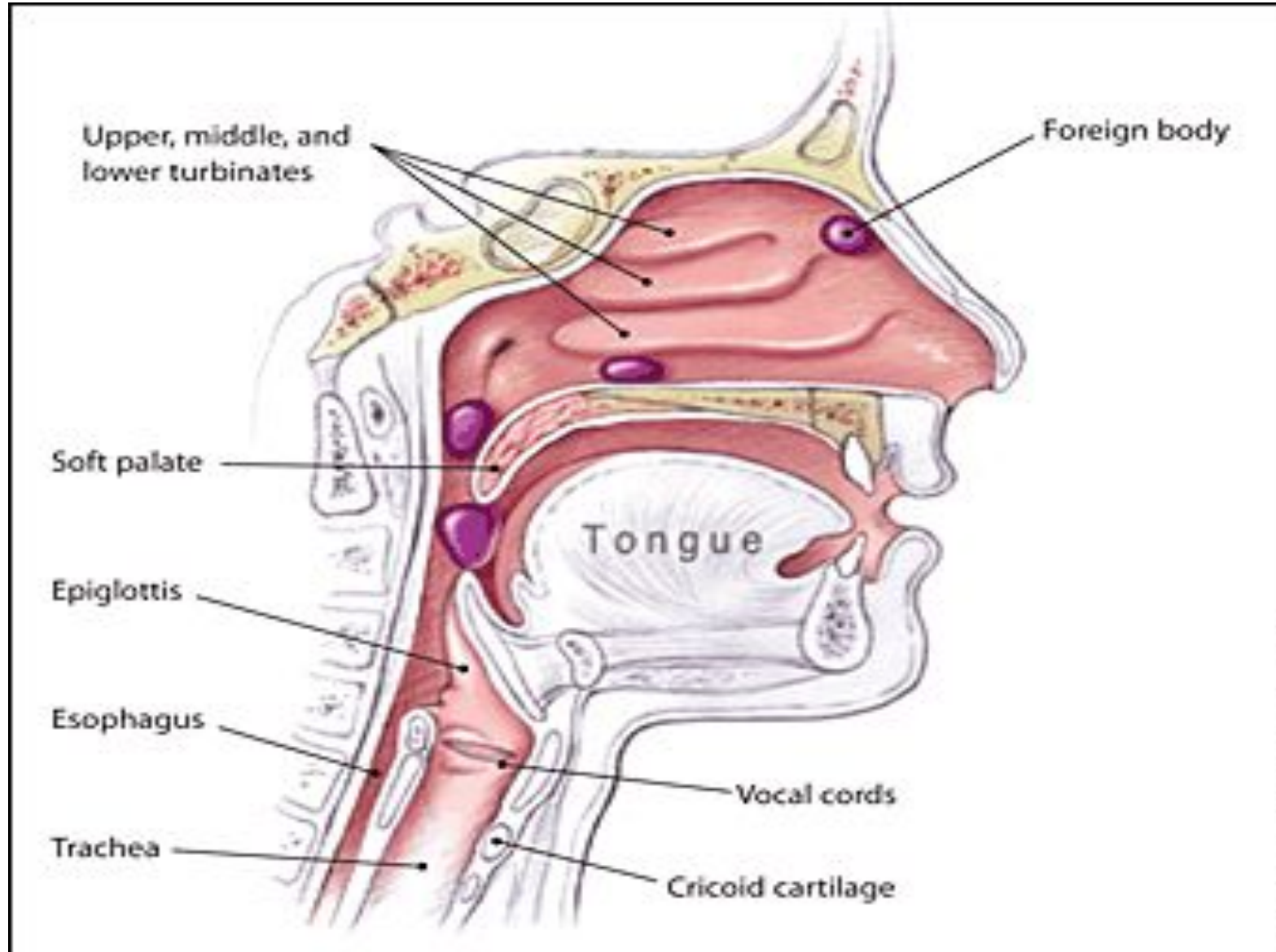
- The esophagus is the most common site of foreign body impaction.
  - ✓ at the level of the thoracic inlet / cricopharyngeus muscle (upper esophageal sphincter).
  - ✓ Or at the level of the aortic arch and the lower esophageal sphincter.
- The external auditory canal. Foreign bodies may become lodged in the narrowing at the bony cartilaginous junction.
- Nose: FB can impact in the nose especially Anterior to the middle turbinate or nasal floor.

# Foreign bodies in the ear





# Foreign bodies in the nose



# Foreign bodies in the throat

- Asphyxia from airway obstruction by an airway or esophageal foreign body is a common cause of death in children.
- Large objects that lodge in the upper airway and trachea cause dramatic signs of upper airway obstruction (eg, dyspnea, drooling, stridor, cyanosis) and carry the worst prognosis.



# Clinical Features.

- An upper airway foreign body can cause partial or complete obstruction.
- Clinical signs of complete obstruction include:
  - ✓ poor air exchange,
  - ✓ ineffective cough,
  - ✓ severe distress,
  - ✓ and cyanosis

# ED Assessment

- The assessment of a patient with a suspected foreign body (FB) in the Emergency Department (ED) involves a systematic approach to ensure timely and appropriate management. Here's a concise overview:

## 1. Primary Assessment:

1. **Airway:** Assess and maintain a patent airway. Evaluate for signs of airway obstruction, stridor, or respiratory distress.
2. **Breathing:** Check for any signs of respiratory distress or compromise.
3. **Circulation:** Assess for signs of bleeding and circulatory compromise.
4. **Disability:** Evaluate the patient's neurological status.

# ED Assessment

## **1. History Taking:**

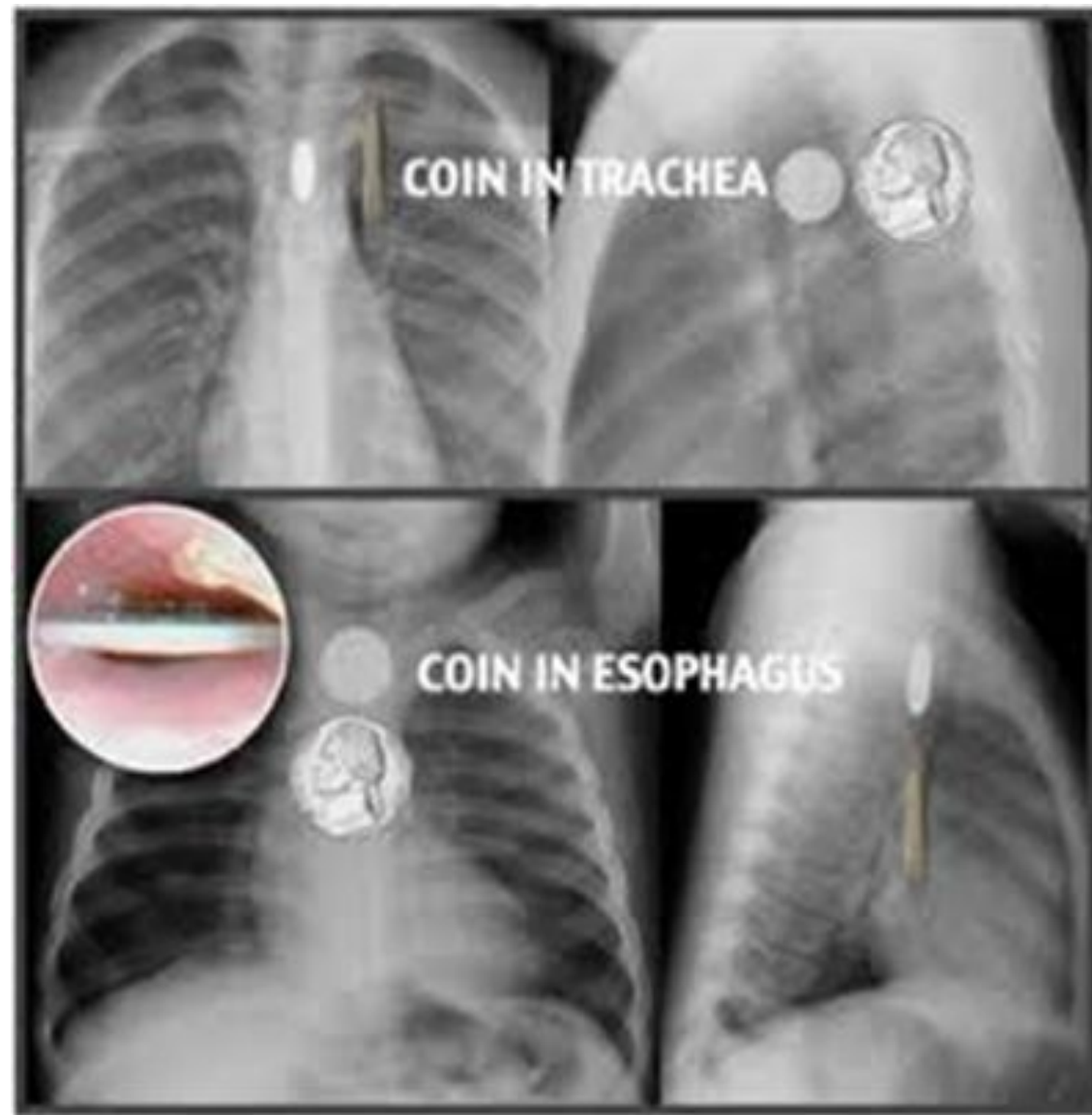
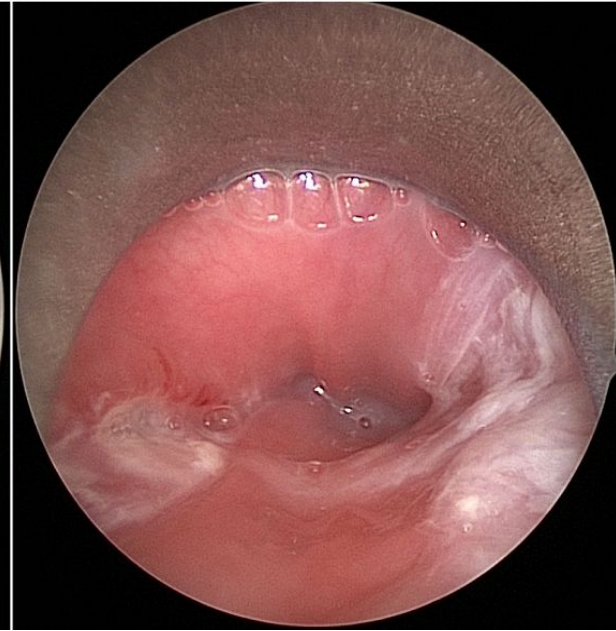
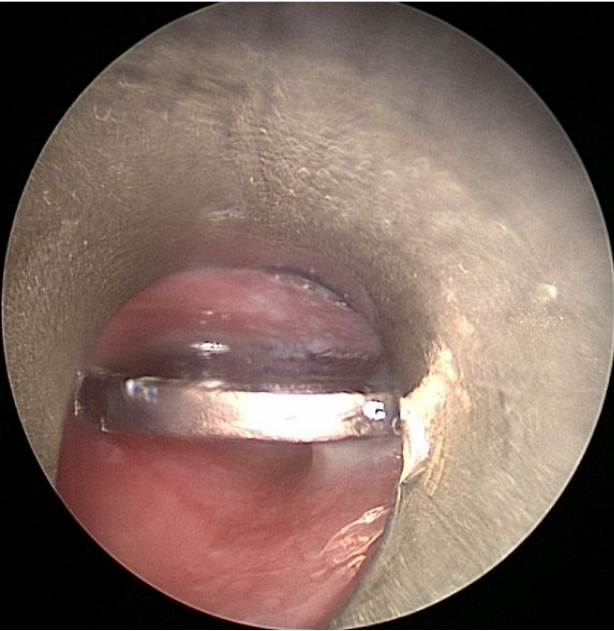
1. Gather information about the nature of the foreign body, how and when it occurred, and any associated symptoms.
2. Inquire about the patient's medical history, especially any pre-existing conditions or prior airway issues.

## **2. Physical Examination:**

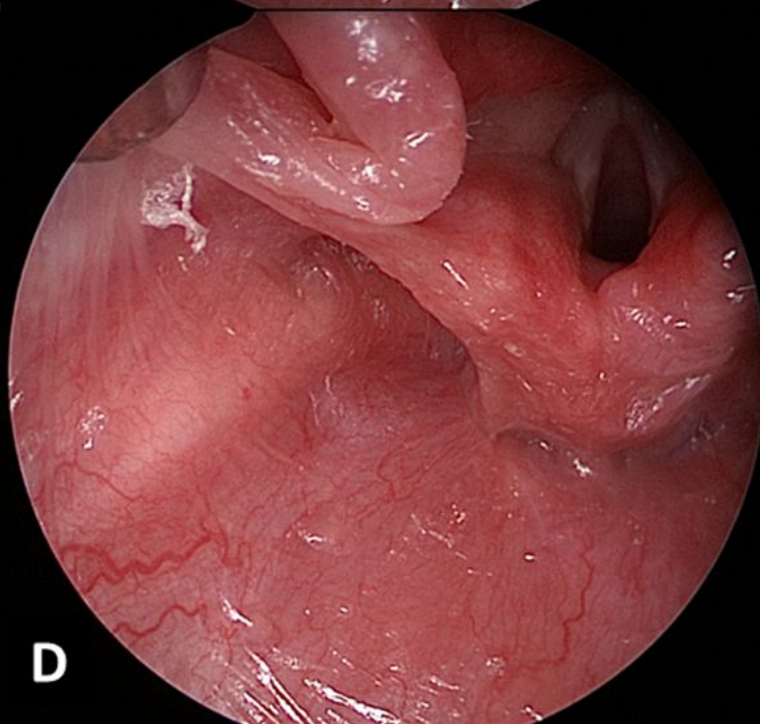
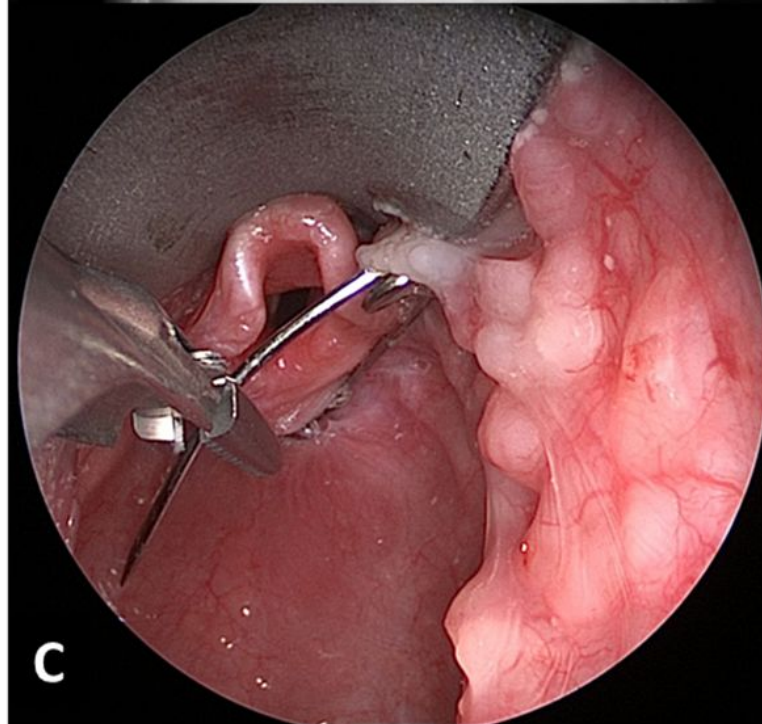
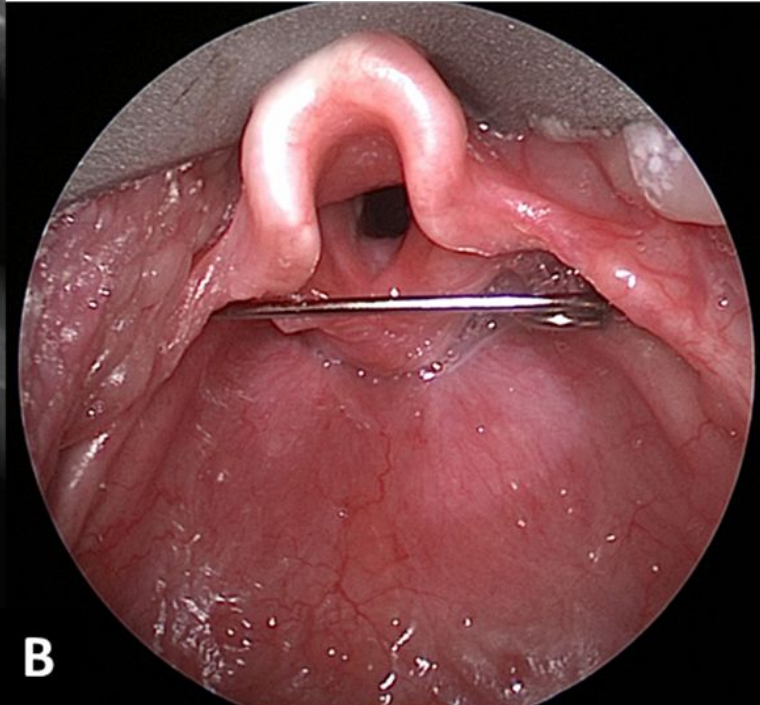
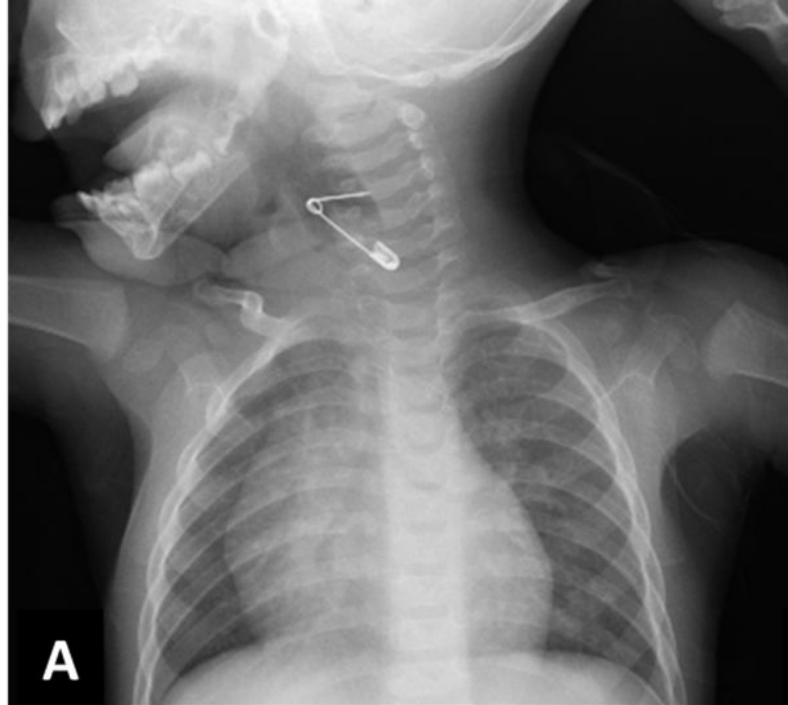
1. Inspect the affected area for signs of trauma, bleeding, or visible foreign bodies.
2. Evaluate the airway for any obvious signs of obstruction or respiratory distress.
3. Perform a thorough examination of the affected orifices (nose, ears, eyes, throat) to locate and assess the foreign body.

# Diagnostic Testing

- In a child with an aspirated foreign body in the upper airway, there is often no time, nor is it prudent, to perform diagnostic imaging.
- In a stable patient:
  - a portable lateral neck radiograph and chest X-ray.
  - CT Scan
  - Diagnostic flexible bronchoscopy

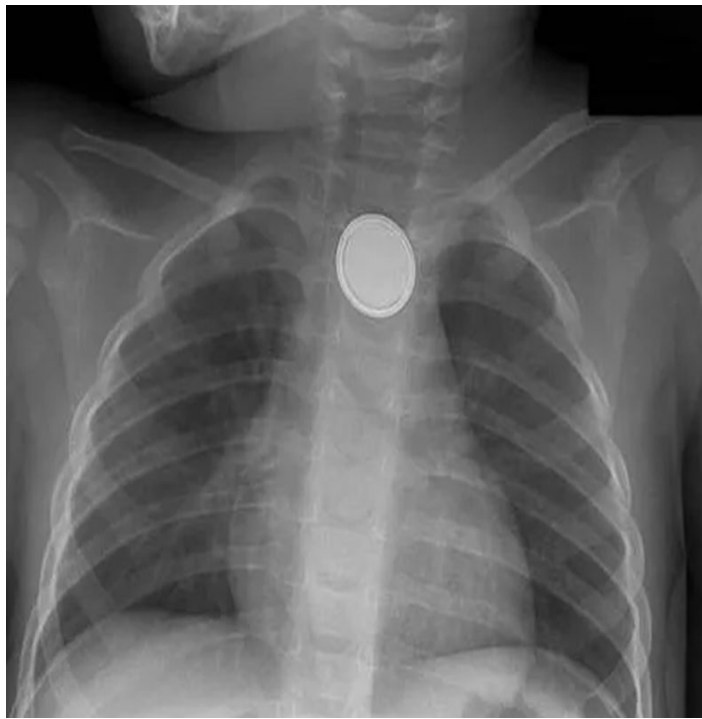








- Beware the “**double-ring**” sign: this is a button battery
- ***This is an emergency:*** the electrolyte-rich mucosa conducts a focal current from the narrow negative terminal of the battery, rapidly causing burn, necrosis, and possibly perforation. Emergent removal is required.



# Management

- The approach to management depends on the location, nature, and complications of the foreign body.
- Non-invasive methods (e.g., suction, forceps) may be used for removal in some cases.
- Invasive procedures, such as endoscopy or surgical intervention, may be required for certain situations.



**Mother's Kiss**

**Positive Pressure Ventilation with Bag Valve Mask**



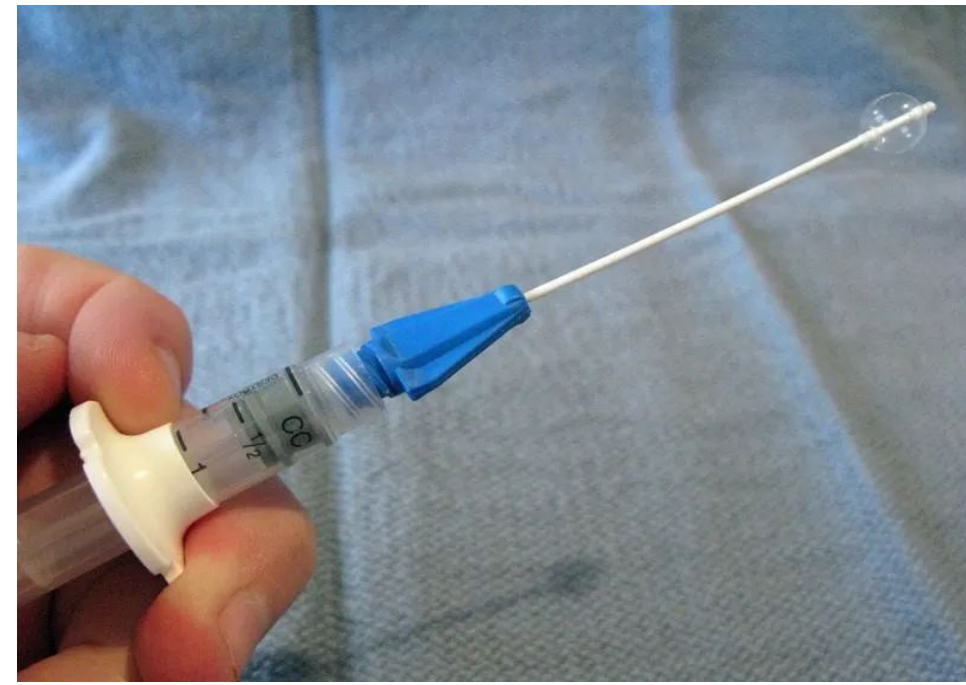




**Beamsley Blaster (Continuous Positive Pressure)  
Technique**



**Balloon Catheters (Katz extractor)**



# Choking

- Choking is a common preventable cause of cardiac arrest.
- The correct response for a choking person depends on the degree of airway obstruction, whether the person is responsive or not, and the age of the person.

## SYMPTOMS OF CHOKING

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**Universal choking sign**

- Inability to speak
- Difficulty breathing or noisy breathing
- Inability to cough forcefully
- Skin, lips and nails turning blue or dusky
- Loss of consciousness
- **DO NOT DO THE HEIMLICH MANEUVER ON A PERSON WHO CAN SPEAK!**

# Management

- An acute obstructing upper airway foreign body requires emergent intervention with basic life support maneuvers.

## **❑ Partial obstruction:**

- Breathing but may also be wheezing or coughing and making noise.
- Stay with the person and try to keep them calm
- Encourage them to cough and call for help if the person seems to be getting worse



# Complete obstruction:

## ☐ <1 year:

- **back blows:** head-down, 5 back-blows (between scapulae), 5 chest-thrusts (sternum). Reassess, repeat as needed.
- Finger sweeps not recommended.

## ☐ >1 year :

- Heimlich maneuver for conscious children > 1 year and adults
- CPR for unconscious patients.

## Five and five

Give five back blows

Give five abdominal thrusts



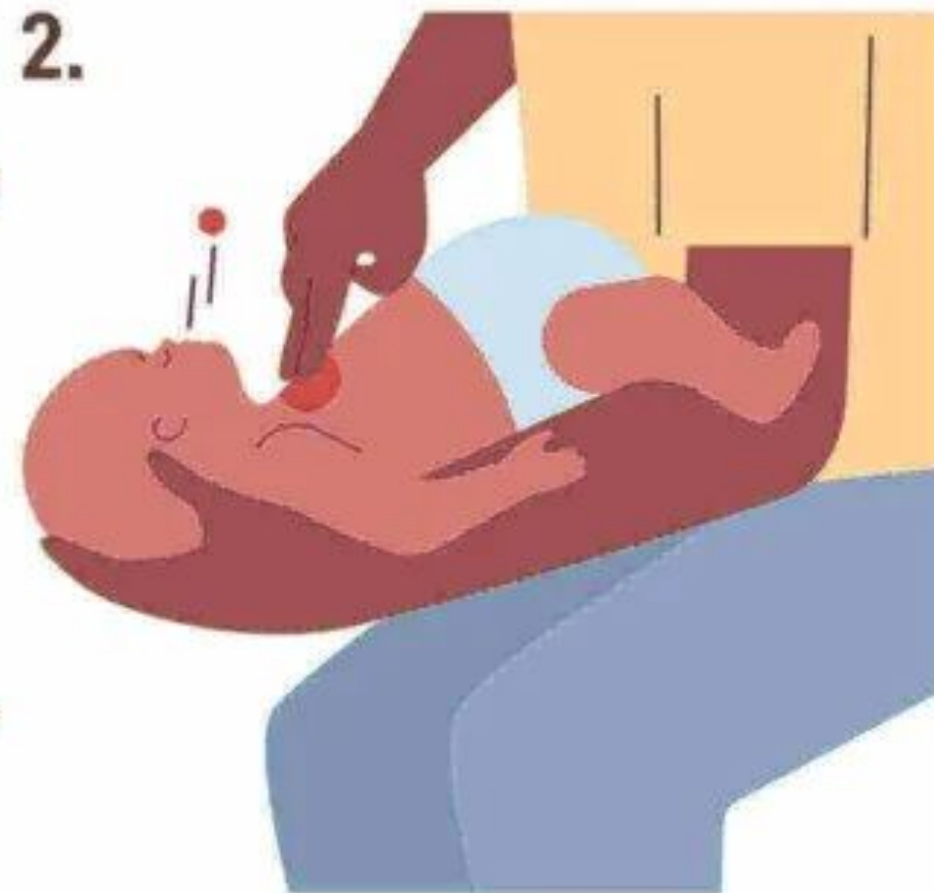
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**Apply 5 Back Thrusts Between  
Shoulder Blades With One Hand**



**Repeat Several Times**

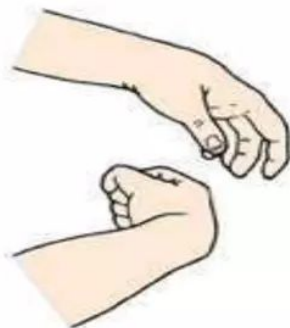


**Apply 5 Chest Thrusts  
Using 2-3 Fingers**

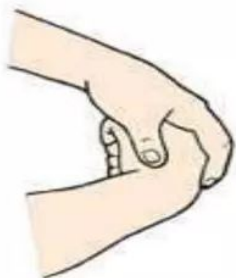
## Heimlich Maneuver



1. Lean the person forward slightly and stand behind him or her.



2. Make a fist with one hand.



3. Put your arms around the person and grasp your fist with your other hand near the top of the stomach, just below the center of the rib cage.



4. Make a quick, hard movement, inward and upward.

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Place the infant stomach-down across your forearm and give five thumps on the infant's back with heel of your hand



ADAM



Place fist above navel while grasping fist with other hand. Leaning over a chair or counter-top, drive your fist towards yourself with an upward thrust

ADAM

# Complications

- EAR

- Pain
- Deafness or muffled hearing
- Discharge or swelling
- Tearing of the eardrum

- NOSE

- Minor epistaxis (most common)
- Sinusitis
- Bronchoaspiration

- THROAT & ESOPHAGUS

- Mediastinitis



# Red Flags for Foreign Bodies

- **The important red flags for any patient presenting with a foreign body include:**
  - Any signs of airway compromise, such as stridor, dysphonia, or drooling
  - Any signs of esophageal perforation, such as chest pain, features of sepsis, or surgical emphysema
  - Any history of button battery ingestion
  - If any of the above are present, request the help of a senior immediately.



# Key Points

- Foreign body insertion is a common presentation to emergency departments.
- The urgency of FB removal depends entirely on the location and nature of the FB, and the patient's clinical status.
- Soft food boluses are also common presentations, however the clinical approach is similar to a suspected ingested foreign body

Any

Question

