

FOREIGN BODY INGESTION

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HISTORY

- ❖ WITNESSED or UNWITNESSED
- ❖ Time of ingestion
- ❖ Description of object: Size, Shape, Length, Width
Sharp end, similar object for comparison
- ❖ Last meal time
- ❖ History of GI anomaly, surgery or disease
- ❖ Symptoms
 - FB sensation
 - Refusing oral intake
 - Drooling, dysphagia, gagging
 - Choking or coughing with PO intake
 - Respiratory symptoms: Stridor, Hoarseness
 - Chest pain
 - Abdominal pain, vomiting (signs of perforation, obstruction)
 - GI Bleeding

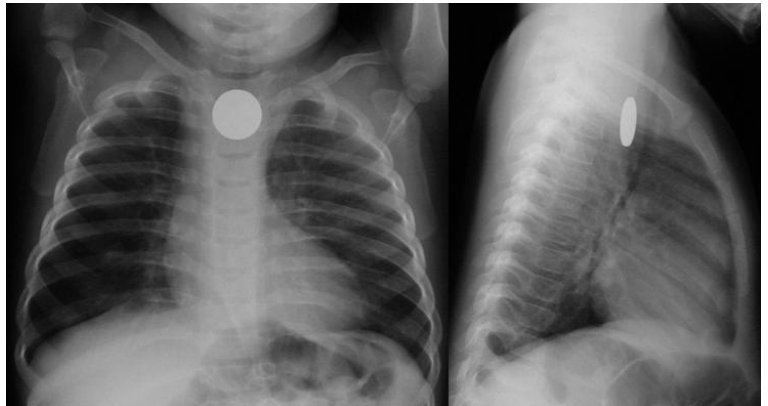


PHYSICAL EXAM

- ❖ Vital signs
- ❖ Drooling, oral lesions
- ❖ Tripod position
- ❖ Neck crepitus, stridor
- ❖ Wheezing, unequal breath sounds
- ❖ Check ears and nose, especially if FB not confirmed on X-ray
- ❖ Signs suggesting acute abdomen

IMAGING TIPS

- ❖ AP and lateral view of chest, neck, and abdomen
- ❖ Flat object location on AP
 - Esophagus: Coin appears circular
 - Trachea: Coin appears as a slit
- ❖ Batteries
 - Double ring on AP view
 - Step-off between the anode and cathode on lateral view
- ❖ Magnets
 - Difficult to reliably distinguish single from multiple magnets
- ❖ Non-radiopaque FB
 - Avoid GI contrast studies for suspected esophageal FBs: May obscure visualization on endoscopy and also increases the risk of aspiration if there is an esophageal FB
 - Endoscopy favored
 - CT scan may be considered in special circumstances



WHO NEEDS ENDOSCOPY & WHEN

EMERGENT

- Esophageal location**
- Button battery – NO DELAY
 - Obstructive symptoms
 - Respiratory distress
 - Significant pain
 - Sharp pointed objects
 - Multiple magnets
- Stomach location**
- Multiple magnets

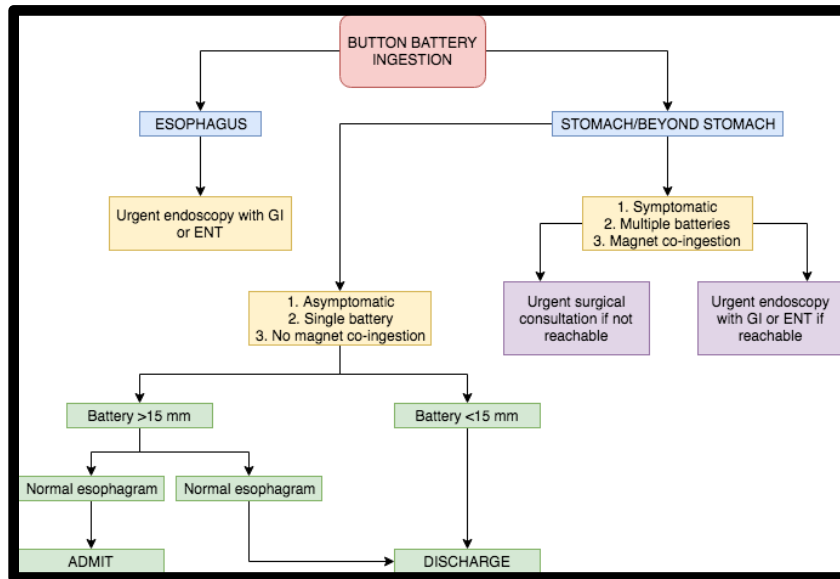
URGENT

- Esophageal location**
- Minimal symptoms
 - Sharp longer objects in stomach with no symptoms

NON-URGENT

- Stomach location**
- FB > 2cm wide
 - FB > 5cm long

BUTTON BATTERY INGESTION



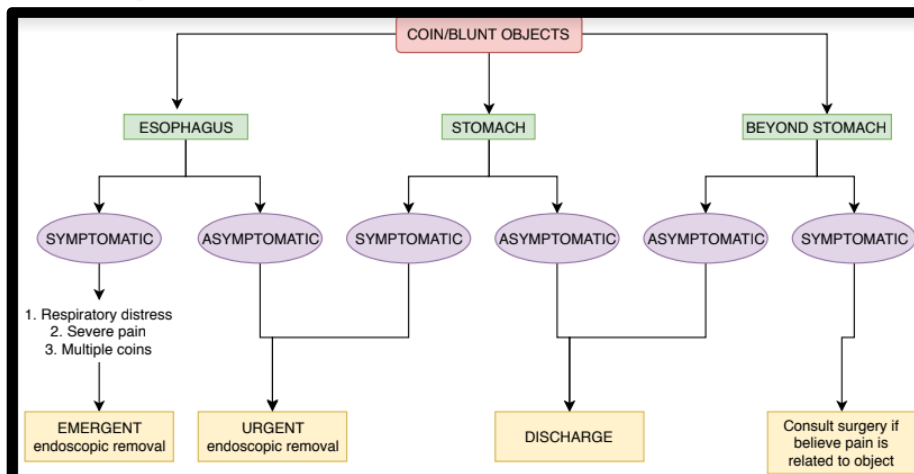
Button Battery Facts

- ❖ Serious burns can occur within 2 hrs of ingestion
- ❖ Symptoms may be delayed
- ❖ If mucosal injury is present after removal, observe for delayed complications (esophageal perforation, TEF, vocal cord paralysis, tracheal stenosis, mediastinitis, aspiration pneumonia, perforation into a large vessel)
- ❖ Complications may be delayed weeks, months
- ❖ Lithium cell batteries are most frequently involved in esophageal injuries
- ❖ Determination of battery diameter prior to removal or passage is unlikely in at least 40% of cases
- ❖ Assume hearing aid batteries are < 12 mm
- ❖ X-ray overestimates the diameter

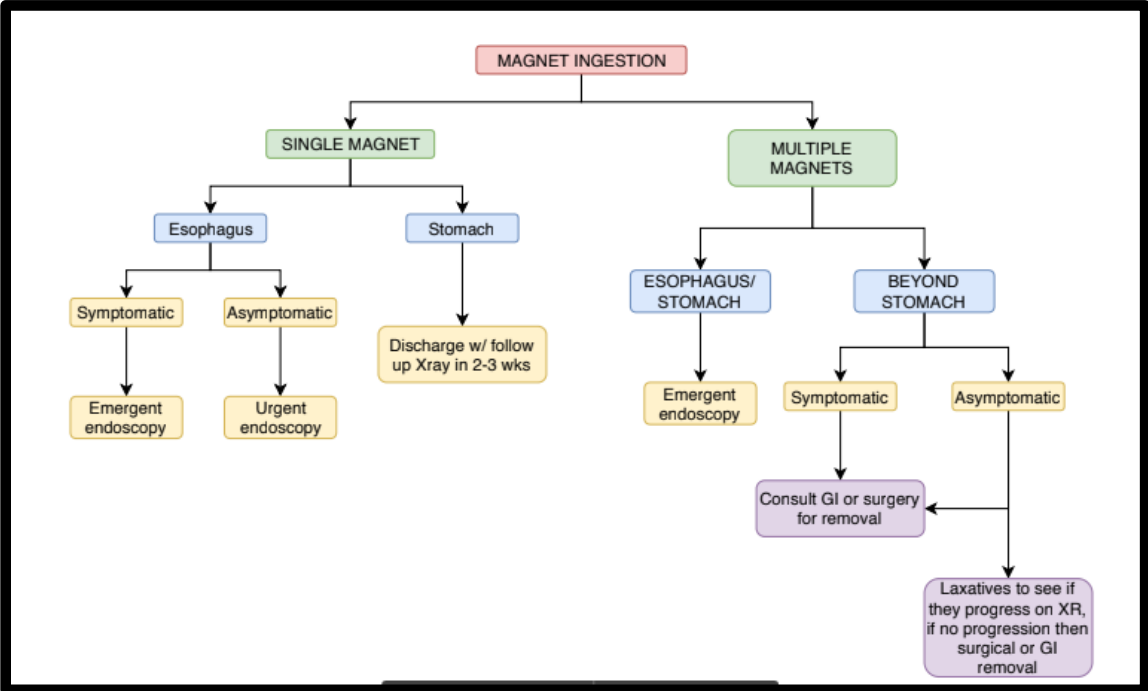
Coins/Blunt Objects Facts

- ❖ Items within the stomach
 - Width > 2 cm, length > 5 cm (less likely to pass pylorus/duodenum)
 - Repeat X-ray
 - Within 2-3 weeks if Age < 2 yrs or Quarter
 - Within 1 week if Cylindrical battery
 - Sooner if symptomatic
- ❖ Items beyond the stomach
 - Return if symptoms
- ❖ Coins usually appear larger on the X-ray due to magnification
 - Quarter → 24 mm
 - Nickel → 21 mm
 - Penny → 19 mm
 - Dime → 18 mm

COINS/BLUNT OBJECTS INGESTION



MAGNETS INGESTION



RADIOPAQUE/SHARP RADIOTRANSLUCENT OBJECT INGESTION

