

Foreign Body Ingestion Pathway: ED and Inpatient Management

August 2026



For all known or suspected button battery ingestions (<12 hours) that are called-in or transferred to the ED, recommend **immediate** administration of oral Honey (or Carafate) per [ED CIP 5-10](#)²

Patient Presents with Known or Suspected Foreign Body Ingestion

- Obtain history, physical exam, and Foreign Body Series per radiology protocol¹
- Keep patient NPO

Determine Type, Size, & location of Foreign Body

Button Battery

- Refer to [Button Battery Ingestion Management](#)

Coin Or Other Blunt Object Sharp Object

Magnet

- Refer to [Magnet Ingestion Management](#)

Foreign Body Above Or Even With Clavicle

- Arthur M. Blank:**
- Consult ENT on even days only
 - Consult Surgery on odd days

Scottish Rite:
Consult Surgery

Foreign Body Below Clavicle

Located in esophagus

Consult GI

Beyond esophagus

Is this a Sharp Object?

No

Yes

- **Discharge home**
- Recommend stool straining
- Follow up X ray in 1 week (if object not seen in stool)
- Return to ED if symptoms develop (pain, vomiting)

Object > 2.5 cm diameter **OR** > 6cm long **OR** patient < 2 years old?

No

Yes

Consult GI

Symptomatic?²

No

Yes

- **If Above Pylorus, Consult GI**
If concern for perforation or complicated removal, GI to consult surgery
- **If Below Pylorus, Consult Surgery**

¹X-ray

Given the difficulty in distinguishing single vs. multiple magnet ingestion, a 2-view X-ray should be obtained with Attending Radiologist confirming a single magnet.

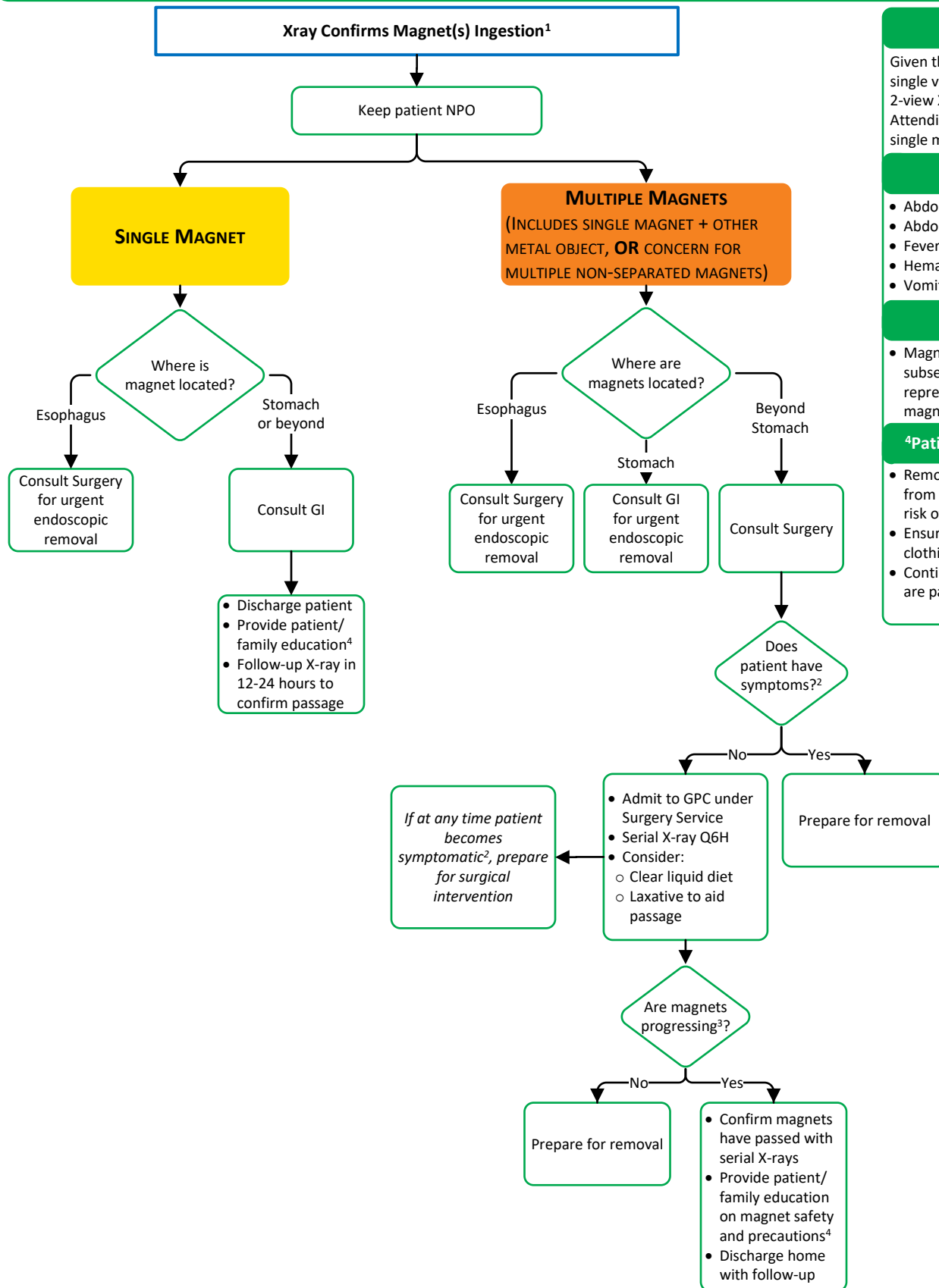
²Symptoms

- Abdominal pain
- Abdominal distention
- Fever
- Hematochezia
- Vomiting

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Magnet Ingestion

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¹X-ray

Given the difficulty in distinguishing single vs. multiple magnet ingestion, a 2-view X-ray should be obtained with Attending Radiologist confirming a single magnet.

²Symptoms

- Abdominal pain
- Abdominal distention
- Fever
- Hematochezia
- Vomiting

³Magnet Progression Consideration

- Magnets showing movement on subsequent X-rays may not represent true progression of magnet within a single lumen.

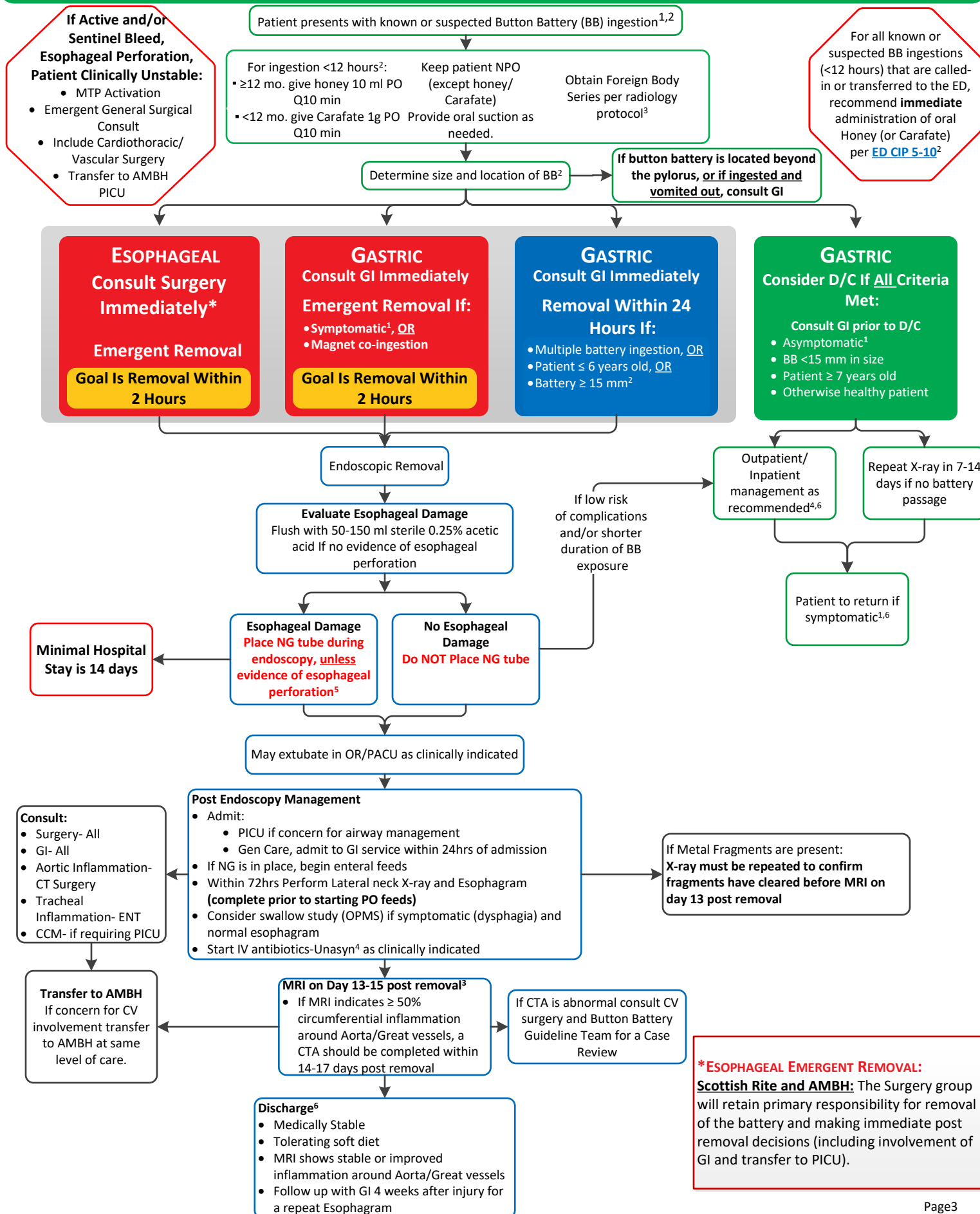
⁴Patient and Family Education

- Remove all metallic, magnetic objects from child's environment to prevent risk of ingestion
- Ensure no magnets, metal on child's clothing (buckles, snaps, buttons)
- Continue precautions until magnets are passed

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Button Battery Ingestion

March 2021
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NOTES AND RECOMMENDATIONS

¹ SUSPECT BUTTON BATTERY (BB) INGESTION	² DETERMINE BB SIZE AND LOCATION	³ RADIOLOGY	³ RADIOLOGY CONT'D
- Patient with abrupt onset of any one of the following: refusal of oral intake, difficulty swallowing, chest pain, drooling, airway obstruction, or wheezing or stridor without typical prodromal symptoms of viral illness. - Presumed "coin" shape ingestion. For patients presenting to an Urgent Care center with BB ingestion, immediately begin Honey/Carafate and contact Transfer Center for Emergent transfer to AMBH or SR. - Batteries located in the esophagus may be asymptomatic initially. Do not wait for symptoms to appear. Serious burns can occur within 2 hours. - Do not induce vomiting or give cathartics - Consult the National Battery Hotline at 800-498-8666 (or 202-625-3333) as needed for assistance in battery identification & patient management Symptoms of BB ingestion include: Occult or visible bleeding, persistent or severe abdominal pain, vomiting, signs of acute abdomen and/or fever, and/or profoundly decreased appetite (unless symptoms unrelated to battery ingestion)	- Honey/Carafate is recommended for all known or suspected BB ingestions within the past 12 hours (increased risk of esophageal perforation if >12 hours) See ED CIP 5-10: Patients Presenting with Suspected Foreign Object - Begin honey/Carafate once BB ingestion suspected. If X-ray shows esophageal location, continue until patient reaches the OR. Discontinue if battery located in the stomach. - If ≥12 mo. give honey 10 ml PO Q10 min, max 6 Doses* - If <12 mo. give Carafate 1g PO Q10 min, max 3 doses* <i>*May exceed max doses per MD order</i> 1 honey packet (9.2 ml) is acceptable substitute for 10 ml dose - Chemical content & diameter of the BB can be determined from imprinted code found on the battery case - Assume hearing aid BB's are <12mm - Cylindrical batteries pose a lower threat for caustic damage after ingestion than BB, but due to their size may become trapped in the stomach. Any cylindrical battery ingestions warrant prompt x-ray evaluation & urgent endoscopic removal if located in the esophagus. - Removal of gastric BB <15mm at the discretion of consulting provider	- For all suspected BB ingestions, Foreign Body Series to include: AP x-ray nose to rectum & lateral x-ray neck. If circular metallic foreign body identified in chest, obtain lateral x-ray of chest to evaluate position of negative battery pole. - Esophagram should be performed as "pull back" esophagram with contrast injected through enteric tube by radiology - MRI on Day 13-15 post removal for <u>all</u> patients with BB removal (not to be done afterhours or on weekends without direct permission of radiology attending physician). - MRI to be limited sequence study (about 20 minutes in length). - Need for sedation/anesthesia for MRI is at the discretion of clinical team	Potential MRI findings that might trigger additional imaging and/or clinical intervention. - Proximal Esophageal injury (above carina T5) + tracheal wall thickening - Proximal esophageal injury (above carina T5) + edema/enhancement involving >50% circumference of Aorta/Great vessels - Mid-distal esophageal injury (below carina T5) + edema and enhancement involving >50% circumference of descending thoracic aorta - For Complicated cases may request a case review by the Button Battery Guideline Team & Consider repeat MRI on Day 20 post removal

MANAGEMENT AND FOLLOW-UP

⁴ INPATIENT MANAGEMENT	⁵ DISCHARGE CRITERIA	⁶ OUTPATIENT MANAGEMENT	POTENTIAL COMPLICATIONS
All NG tubes placed under endoscopy must be non-weighted, MRI compatible, Bridle feeding tubes. - If NG tube becomes dislodged, contact provider. Caregiver should not attempt to replace NG at bedside. - Patients with button battery removal esophageal should be admitted. - Once PO feedings advanced, patient must remain on soft diet until D/C - If battery removed from upper esophagus, monitor closely for voice changes, respiratory distress, or stridor due to possible vocal cord paralysis. Antibiotics: Unasyn 50 mg/kg IV Q6H (max dose 2000 mg). If PCN allergy: Clindamycin 10 mg/kg IV Q8H (max dose 900 mg). Length of antibiotics should be determined by extent of injury - If severe inflammation, mediastinitis, suspected perforation, and/or s/s of SERS or systemic infection (i.e. fever, ↑WBC, ↑CRP), antibiotics may be administered for a min. of 7-10 days. - In other cases, course of antibiotics to be determined by care team	- MRI shows stable or improved inflammation around aorta/great vessels Patient tolerating soft diet - Patient to follow up with GI 4 weeks after battery removal for a repeat Esophagram to evaluate for persistent mucosal irregularity, stricture, and delayed perforation	- Button batteries that have cleared the stomach usually pass the GI tract within 1 week without complications. - Anticipatory guidance to include close monitoring for bloody emesis, melena, cough, and fever, and/or abdominal pain - Patients with symptoms of abdominal pain, hematochezia, or fever should seek immediate medical attention for emergent X-rays. Prompt surgical removal is indicated for symptomatic patients with radiographic confirmation of a retained intestinal Button Battery	- After removal, if mucosal injury was present, observe for and anticipate delayed complications: tracheoesophageal fistula, esophageal perforation, mediastinitis, vocal cord paralysis, tracheal stenosis, tracheomalacia, aspiration pneumonia, empyema, lung abscess, pneumothorax, spondylodiscitis, or exsanguination from perforation into a large vessel. - Complications may be delayed for up to 30 days post ingestion. - Consider battery proximity to the aorta or major vessels. If less than 3 mm tissue between area of esophageal injury and adjacent vessels on MRI/CTA monitor closely for sentinel bleeds. Involve cardiothoracic and vascular surgery early if possibility of impending esophageal-vascular fistula.

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