Magnet ingestion

Initial presentation

- Obtain history
- Known magnet ingestion
- Unexplained GI symptoms with rare earth magnets in the environment
- Obtain an abdominal x-ray. If magnets are present on flat plate, obtain lateral x-ray.

Determine single versus multiple magnet ingestion

Single magnet

Within the stomach or esophagus:
- Consult Pediatric GI if available.
- Consider removal if patient at increased risk for further ingestion.
- Follow serial x-rays as outpatient and educate parents.

Beyond the stomach:
- Consult Pediatric GI if available.
- Consider removal if possible.
- Follow with serial x-rays and educate parents.
- Confirm passage with serial x-rays.
- If delayed progression, may use PEG 3350 or other laxative to aid passage.

Successful removal:
- Discharge home with follow up and education.

Unsuccessful removal:
- Refer to surgery for removal.

No Progression on Serial x-rays:
- Admit for further monitoring and serial x-rays or surgical removal.
- May use PEG 3350 or other laxative to aid in passage and to help prepare for colonoscopy.
- Continue serial x-ray every 8-12 hours. If no symptoms, then proceed with surgical removal or endoscopic removal with surgical backup.

Successful endoscopic removal:
- Discharge after feeding, tolerate end education.

Progression of magnets:
- On serial x-rays:
  - Education parents on precautions and discharge with close follow-up.
  - Confirm passage with serial x-rays.
  - If at any time magnets do not progress or patient becomes symptomatic, admit to hospital for removal of magnets.

Multiple magnet or single magnet and metallic object

Within the stomach or esophagus:
- If pediatric GI available, notify for removal, especially if <12 hours.
- If not available, transfer to referral center.
- If >12 hours until time of procedure, then consult pediatric surgery prior to endoscopic removal.

Beyond the stomach:
- Consult pediatric GI and pediatric surgeon if available.
- If not available, send to referral center.
- Management depends on whether symptomatic or asymptomatic.

Symptomatic:
- Refer to Pediatric Surgery.

Asymptomatic:
- If no obstruction or perforation on x-ray, may remove by enteroscopy or colonoscopy if available or follow with serial x-ray.
- May do serial x-ray in ED to check for progression every 4-6 hours.

Symptomatic:
- Confirm passage with serial x-rays.
- If at any time magnets do not progress or patient becomes symptomatic, admit to hospital for removal of magnets.

Initial presentation:

Parental education:
- Remove any magnetic object near by.
- Avoid clothes with metallic buttons or belts with buckles.
- Ensure no other metal objects or magnets are in the child environment for accidental ingestion.