Button Battery Ingestion Flow chart 1. Transferred patient with history of button battery ingestion should go to the trauma room for X-ray evaluation 2. Pediatric Surgery to be notified while the patient is in route 3. Patient presents to ED with suspected non-button battery or coin ingestion or dysphagia, drooling, pain with swallowing, or not able to eat X-ray Foreign Body Order YES Disc shape in Esophagus NO In stomach. Double circle sign or step off determine if shape of a battery battery or coin NO YES YES Battery present NO **Emergent Pediatric** Treat as a Surgery consult and coin consult consider giving Pediatric sucralfate in ED, 10ml Surgery or Treat as a Consult Pediatric GI PO every 10 minutes Pediatric GI coin for removal if the up to three doses for removal battery fails to pass Emergent removal by Pediatric Surgery, rapid sequence induction in OR if stable. IV placement in ED

Addendum for Button/disc battery in the stomach

- -It is rare for a battery that passes through the stomach to require surgical intervention.
- -The battery is unlikely to cause damage in the stomach and could safely be given 24-48 hours to pass out of the stomach **IF** the patient remains asymptomatic. -If the patient remains asymptomatic, but the battery has not passed a repeat X-ray should be obtained at 48 hours. If the battery remains in the stomach it should be removed.
- -If it has passed out of the stomach, recommend observation at home (looking for battery to pass and/or to see if symptoms develop).
- -Consider repeat radiographs to confirm passage if passage not observed in 10-14 days. Confirming passage may avoid urgent diagnostic intervention for minor symptoms developing later.

Adapted from https://www.poison.org/battery/guideline

Anfang RR, Jatana KR, Linn RL, Roades K, Fry J, Jacobs IN: pH-neutralizing esophageal irrigations as a novel mitigation strategy for button battery injury. Laryngoscope. 2018 Jun 11; Epub ahead of print.

Battery ingestion flow chart 4/2020 Developed and reviewed by: : Albert Ross, Francois Luks, Joshua Honeyman, Frank Overly, William Lewander