

Foreign Body removed through Laparotomy: A Case Report and Literature Review

Kayla Nguyen, MD¹; Duyen Quach, MD¹; David Ortiz, MD¹; Dominique Norris, BS²; Srinivas Ramireddy MD¹; Jody Smith MD¹

¹ Department of Surgery, Graduate Medical Education, HCA Healthcare Kingwood (Kingwood, TX), ² College of Medicine, Department of Clinical Sciences, University of Houston (Houston, TX)

Background

- Foreign body ingestions occur in the pediatric and adult populations with psychiatric history. Majority of patients present asymptotically.
- Diagnosis can be confirmed with X-ray or computed tomography(CT).
- Most often, no specific treatment is required and swallowed objects pass through the digestive tract spontaneously in 80% of patients. Less than 20% of patients require endoscopic retrieval. Lastly, <1% will warrant surgical intervention.
- There are few studies detailing treatment and management of repeated abdominal surgery for foreign body ingestion

Case Presentation

- 65 year old male with history of bipolar disorder, schizophrenia, Parkinson's, seizures and previous exploratory laparotomy for foreign body ingestion presenting with altered mental status after ingestion of multiple foreign bodies 48 hours prior.
- Endorsing epigastric pain since ingestion.
- CT Abdomen/Pelvis from the outside hospital demonstrated multiple linear radiopaque densities throughout the GI tract: stomach, small bowel, and colon.
- He was taken emergently for endoscopy. There, it was noted that the patient had ingested multiple razor blades adhered together into a mass in the antrum.
- General Surgery was consulted, and he was taken to the operating room emergently for exploratory laparotomy, gastrotomy, and removal of multiple sharp foreign bodies.

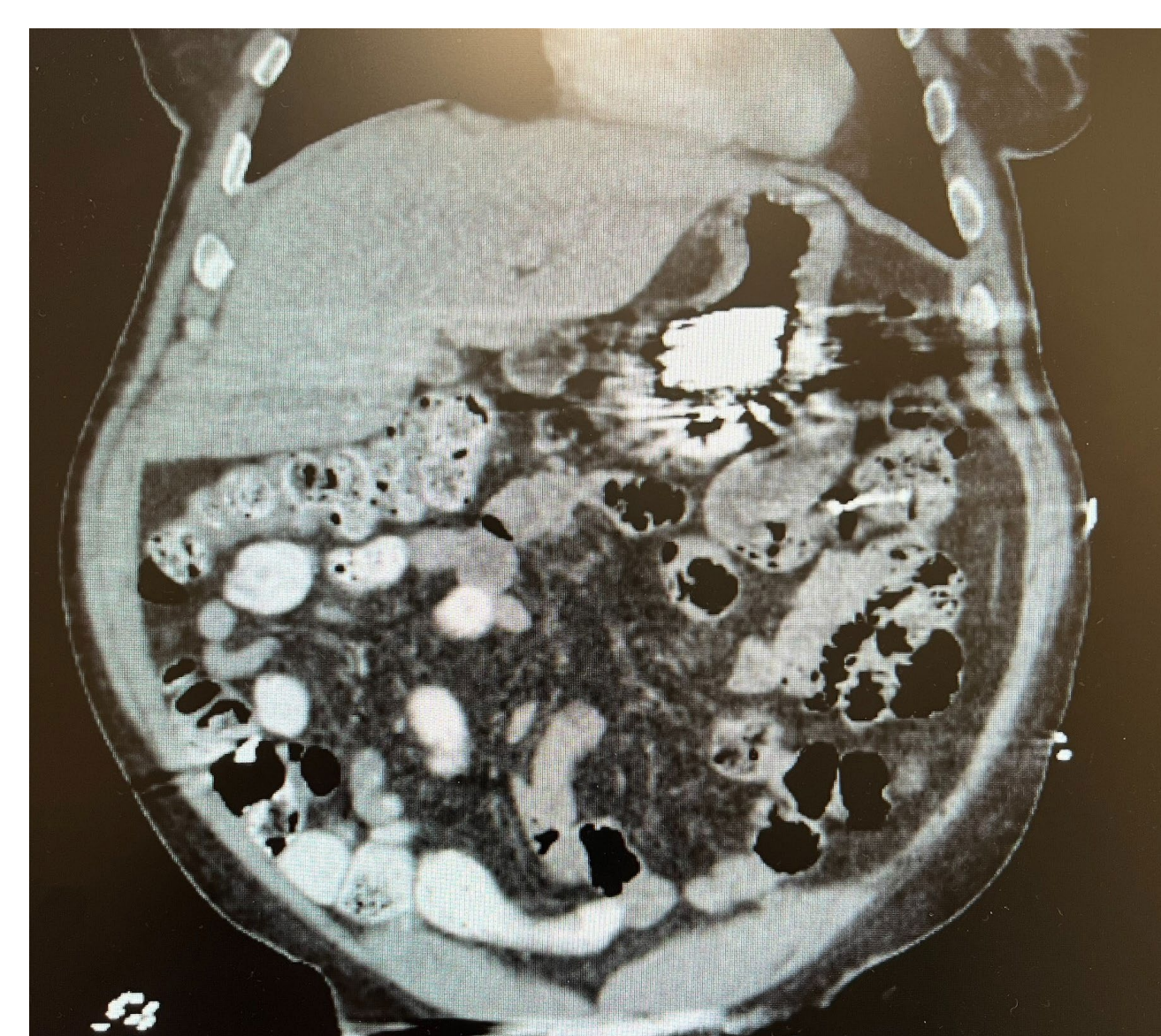


Figure 1: CT Abdomen/Pelvis with linear metallic foreign bodies.

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

Images

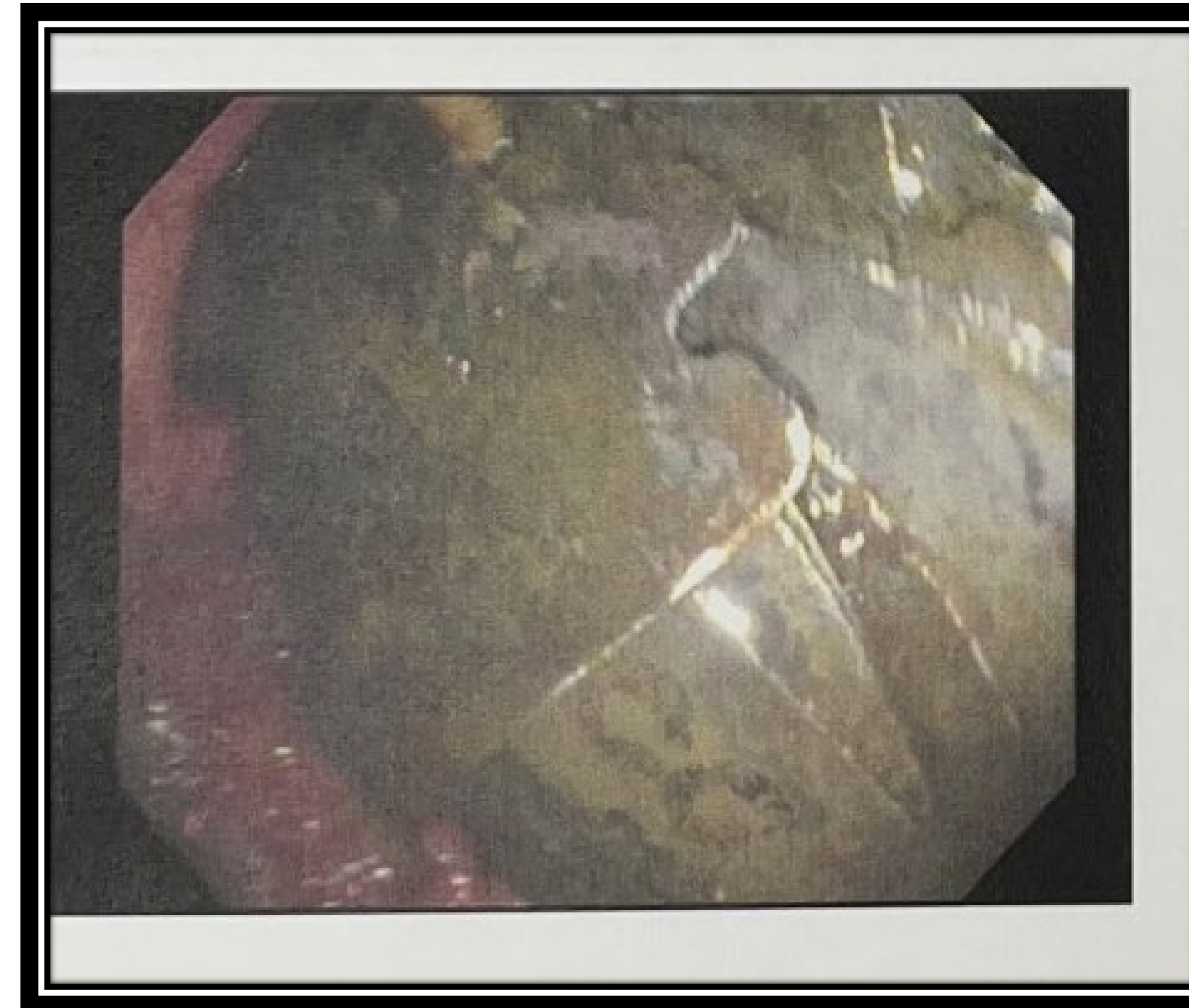


Figure 2: Razor blades found prepyloric during endoscopy.



Figure 3: Razor blades removed through gastrotomy.

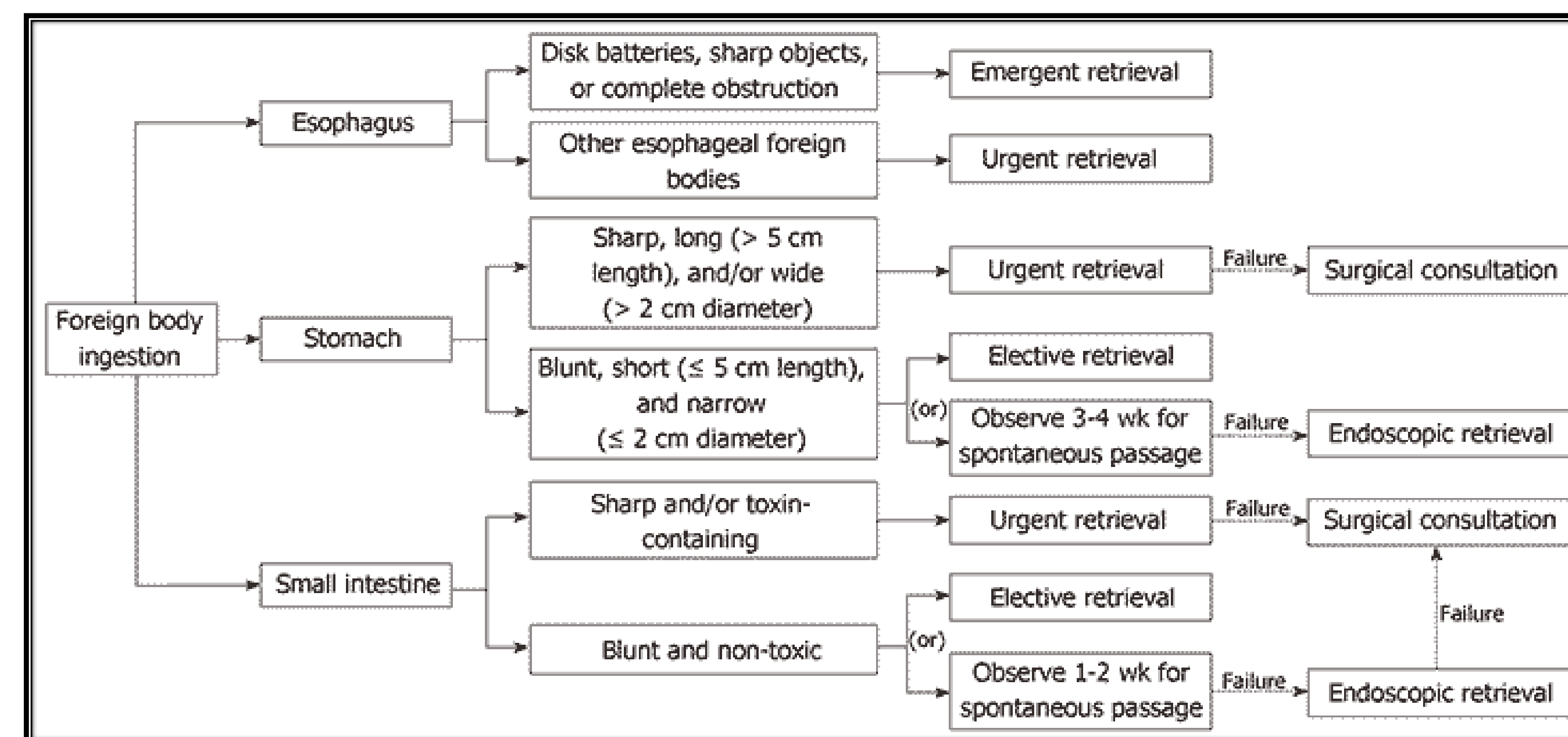


Figure 4: Current Guidelines for foreign body management.

Discussion

- The management of intentional foreign body ingestion in the psychiatric population is complex.
- Cases of foreign body ingestion should be further evaluated with imaging to determine location and evaluate need for endoscopic or surgical intervention.
- Management is based on location, type of foreign body, and failure of management with previous interventions.
- Absolute indications for surgical intervention include: obstruction, perforation, and peritonitis.
- In this patient population, evaluating symptoms and progression of the physical exam can be challenging making early evaluation for endoscopic or surgical intervention imperative.

Conclusion

- Surgical intervention is indicated in sharp foreign body ingestion that presents for concerns of perforation, obstruction, or failure of spontaneous passage/endoscopic retrieval.

References

- Rezazadeh A, Khanghah AS, Mousazadeh S, Noori F. Removing 216 sharp metal foreign objects from the digestive tract of a 30-year-old male: case report. *Ann Med Surg (Lond)*. 2023 Jul 28;85(9):4553-4560. doi: 10.1097/MS9.0000000000000377. PMID: 37663736; PMCID: PMC10473348.
- Sugawa C, et al, "Endoscopic Management of Foreign Bodies in the Upper Gastrointestinal Tract: A Review." *World Journal of Gastrointestinal Endoscopy* 2014; 6(10): 475-481.
- ASGE Guideline, "Management of Ingested Foreign Bodies and Food Impactions." *Gastrointestinal Endoscopy Journal* 2011; 73 (6): 1085-1091.
- Gilger M, Jain A, et al, "Foreign Bodies of the Esophagus and Gastrointestinal Tract in Children." Last Update: December 10, 2020.
- Bekkerman, M, et al, "Endoscopic Management of Foreign Bodies in the Gastrointestinal Tract: A Review of the Literature." *Gastroenterology Research and Practice* 2016.
- Longstreth G, Longstreth K, Yao J, "Esophageal Food Impaction: Epidemiology and Therapy. A Retrospective, Observational Study." *Gastrointestinal Endoscopy* 2001; 53(2): 193-198
- Fung B., et al. "Foreign Object Ingestion and Esophageal Food Impaction: An Update and Review on Endoscopic Management." *World Journal of Gastrointestinal Endoscopy* 2019; 11(3) 174-192.
- Neves F, et al. "Body Packing by Rectal Insertion of Cocaine Packets: A Case Report." *BMC Research Notes* 2013; Article 178.