

Esophageal Button Battery Retrieval: Time-in May Not Be Everything Sriya Bhumi, MD, MBA¹; Sheena Mago, DO²; Marianna Mavilia-Scranton, DO³; John Birk, MD³; Houman Rezaizadeh, MD³

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INTRODUCTION

- Ingested button batteries may cause gastrointestinal injury via electrical discharge, corrosive contents, and toxicity leading to increased risk of fistulas, perforation, and stricture. ^{1,2}
- Current guidelines recommend emergent endoscopic retrieval within 2-6 hours for disk batteries in the esophagus.^{3,4}
- We present a case of delayed endoscopic removal in which the patient did not suffer any adverse effects due to prolonged dwell time.

CASE DESCRIPTION

45-year-old male with no past medical history presented 4 days after ingestion of "two magnets" with complaints of dysphagia. He was able to tolerate secretions but not able to eat or drink. Remaining review of systems was negative.

T 98.7 BP 124/80 HR 82 RR 16 SpO2 98% on RA

Physical exam was unremarkable with benign abdomen and clear oropharynx Labs were without leukocytosis or anemia

CXR: One radiopaque foreign body in esophagus at the level of T1 and one in rectum Patient initially refusing EGD until day 6 after ingestion EGD: A 20mm button battery found in esophagus (Fig 1) and mild localized mucosal necrosis underlying object (Fig 2).

The button battery was removed endoscopically with a Roth net.

Objectiv Data

History







Figure 1: Identification of a 20mm button battery in the upper esophagus

DISCUSSION

• This case demonstrates that esophageal dwell time alone is not an independent risk factor for complications and may not correlate with severity of mucosal injury. • It is important to identify when procedures can be performed under controlled circumstances.

• Risks associated with performing emergent endoscopic procedures include availability of on-call staff, abbreviated time for full preoperative evaluation, and logistical challenges.⁵

• Our case contributes to a fund of knowledge regarding delayed retrieval of button battery ingestion and requires additional data to help guide current management.



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HEALTH

Figure 2: Mild localized necrosis of the esophageal mucosa directly underlying the object