

# “Swallowed” Foreign Object Extraluminally Abutting the Internal Carotid Artery

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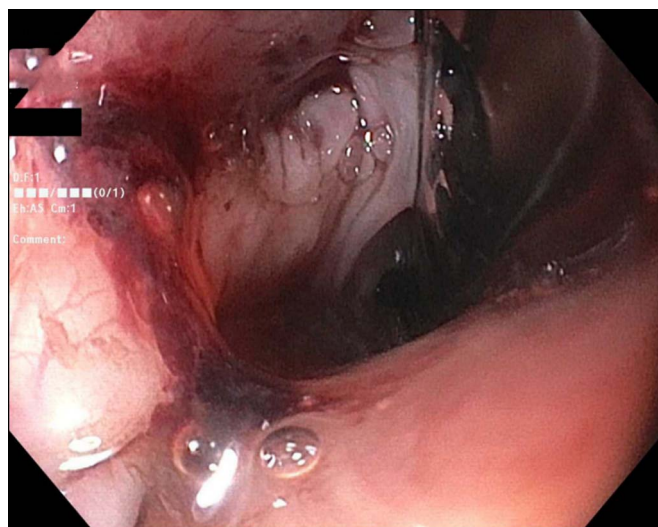
## CASE REPORT

A 39-year-old woman with a history of borderline personality disorder and small bowel perforation secondary to recurrent foreign object ingestions presented with dysphagia and odynophagia after swallowing an ink pen. Examination of her oropharynx was not indicative of any visible injury. A lateral x-ray of her neck was read as a “cylindrical radiopaque object within the cervical esophagus” (Figure 1). An upper endoscopy was performed for retrieval of the pen. After careful inspection of the duodenum, stomach, and esophagus, there was no lumenally based object. The only notable finding was a small excoriation with associated blood in the posterior pharynx (Figure 2). Lack of endoscopic findings prompted cervical computed tomography for further localization of the object. This showed the pen tracking along the internal carotid sheath with concern for internal carotid artery dissection (Figure 3). Given these findings, she was taken urgently to the operating room. A small tear in the posterior pharynx was found. The foreign body was palpated in the retropharyngeal space. The luminal defect was dilated revealing a foreign body in the retropharyngeal space. This was grasped with a clamp and carefully removed, revealing a pen (Figure 4). No damage to the carotid artery was noted, and the patient recovered fully after the procedure.

Most ingested foreign bodies pass spontaneously. Approximately 10%–20% of foreign body ingestions require endoscopic removal, whereas less than 1% require surgery for extraction or to treat complications.<sup>1</sup> Extraluminal migration is rare, with most occurrences taking place with sharp objects such as fish bones. This can lead to complications such as esophageal perforation, retropharyngeal abscess, vascular complications, and death.<sup>2</sup>



**Figure 1.** Lateral neck radiograph showing cylindrical radiopaque object within the cervical esophagus consistent with history of swallowed pen.



**Figure 2.** Endoscopic image demonstrating posterior pharyngeal injury.



**Figure 3.** Cervical computed tomography angiography showing foreign body in the soft tissues of the left neck. The metallic tip of the pen is immediately posterior and lateral to the proximal left common carotid artery. There was focal luminal filling irregularity at the origin of the left internal carotid artery concerning for focal dissection.

This case demonstrates a strange circumstance in which a "swallowed" foreign object was mechanically introduced into the soft tissues of the neck. Initial historical, clinical, and radiographic evidence was indicative of a lumenally based object. However, no object was found on endoscopic inspection. If this is the case, the endoscopist must consider migration of the object into adjacent structures and take prompt action. In these circumstances, cross-sectional imaging is the best modality to identify the extraluminal object and allow for surgical planning.<sup>3</sup> Given the critical structures present in this area, prompt evaluation is imperative. In this case, urgent surgical management prevented potentially catastrophic migration of the foreign object into the internal carotid artery.

## DISCLOSURES

**Author contributions:** All authors contributed equally to this manuscript. SR Douglas is the article guarantor.



**Figure 4.** Surgically removed ink pen.

**Financial disclosure:** None to report.

Informed consent could not be obtained from the patient despite several attempts. All identifying information has been removed from this case report to protect patient privacy.

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