Case Report

Case report of uncommon esophageal foreign body: goat’s eye

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ABSTRACT

Foreign bodies of upper aero digestive tract are commonly dealt by an otolaryngologist. We have seen a variety of foreign bodies of esophagus, varying from irritants to non irritants, sharp to big blunt objects which almost always require intervention. An elderly man presented to us with acute onset of dysphagia after ingesting meat. On flexible esophagoscopy, it was found to be an uncommon foreign body of the esophagus which is goat’s eye. We believe this is the first of its kind to be reported in the literature. He had consumed the whole eyeball with the belief that it would improve his vision. Even in today’s era such weird customs and practices prevail in many remote places. Health education should be advocated in target areas to bring about a change in the mindset of people.

Keywords: Esophagoscopy, Foreign body, Health education

INTRODUCTION

Foreign bodies of upper aero digestive tract are commonly dealt by an otolaryngologist. In adults, foreign body ingestion is usually accidental. Fortunately, spontaneous passage of ingested foreign body is observed in majority of patients and only about 20% require intervention by endoscope or surgical removal.1

Dysphagia and tenderness in neck are the common clinical features of foreign body ingestion. The majority patients had come to the hospital within 24 hours. Lateral view X-ray of the neck is the most useful investigation, with presence of air in the esophagus being a significant finding.2

Khan et al described that post-cricoid region is the site of impaction of foreign bodies. The procedure of esophagoscopy was successful in 90 patients (97%) and failed in 3 patients (3%). Coins were the most common foreign bodies (60%), followed by meat related foreign bodies (22.5%) and dentures in 5% of the cases. Complications occurred in 18% patients and were more common in adults (37.1%) compared to children (8.8%). The most serious complication was pneumo mediastinum. Maximum complications occurred with dentures (80%) and bone chips (42%).2

We have seen a variety of foreign bodies of esophagus, varying from irritants to non-irritants, sharp to big blunt objects. However, goat’s eye impaction in the esophagus is very rare and this incident is believed to be first of its kind to be reported.

CASE REPORT

A 67-year-old gentleman presented to the emergency services with complaints of difficulty and pain on swallowing, drooling of saliva and heart burn following an accidental (as informed by the patient and their relatives) ingestion of mutton eye ball (whole eye) the previous night. The patient was not under the influence of...
alcohol. He was not well educated, did not have any psychiatric illness. There were no symptoms of respiratory distress.

Figure 1 (A and B): X ray of postero-anterior view of chest and right lateral oblique view of chest.

The general physical examination was unremarkable, except that he was looking anxious. Examination of the oral cavity, oropharynx and indirect laryngoscopy were normal. The X-ray of the neck and chest region AP and lateral view were unremarkable (Figure 1).

Figure 2: Foreign body visualized by flexible esophagoscopy.

A flexible endoscopic examination was done by the medical gastroenterologists and a diagnosis of foreign body oesophagus was made (Figure 2).

Attempts were made to retrieve the foreign body by the basket, but they were unsuccessful (Figure 3).

Under general anaesthesia, the rigid esophagoscope was introduced and the foreign body was visualized at 35 cms from the incisors. We tried to remove the foreign body with a grasping forceps but since the muscles (of the eyeball) had already started to necrose we couldn’t get a firm hold. We were only able to take out pieces of necrotized muscles. We also couldn’t puncture the globe since it was very hard. Our only hold was the optic nerve sheath which was grasped firmly and the eyeball was removed along with the rigid esophagoscope. The removed foreign body measured 3×2×1.5 cms (Figure 4).

Figure 3: Attempts were made to retrieve by basket.

Figure 4: Goat’s eye after removal and necrosed muscles were removed in piece meal.

Figure 5: Check flexible esophagoscopy after removal.
An immediate check esophagoscopy was done intraoperatively which revealed no residual debris, bleeding or secretions.

A check flexible endoscopy was done the next day which confirmed minimal esophagitis.

**DISCUSSION**

A foreign body impacted in the esophagus requires immediate attention and early removal, because it may cause perforation, mediastinitis, and respiratory distress depending on the nature of the objects.\(^3\),\(^4\)

In this case, the foreign body could not cross the lower esophageal sphincter and had impacted in the esophagus causing dysphagia. Why the eye ball got trapped at expandable lower part is still unclear but the only possible explanation would be that the raw muscle, as well as the sphincter of the lower of esophagus must have swollen in transit, forcing the eye to become wedged.

Glucagon is thought to decrease lower esophageal sphincter tone and it is used as an alternative to invasive endoscopy for esophageal foreign body impaction. Bodkin et al concluded that glucagon had a low success rate and had adverse effects while not offering any substantial advantages for treatment.\(^5\) we thought of trying glucagon so as to decrease the sphincter action but gave up due to low success rate of glucagon and the possible distal obstruction of foreign body which may require laprotomy for removal.

On further questioning, the poorly educated patient revealed that he had consumed the whole eyeball with the belief that it would improve his vision. Even in today’s era such weird customs and practices prevail in many remote places. Health education should be provided to such people in such places to prevent any dangerous complications due to foreign body impaction.

The limitation of this report is, since this has been an age-old practice in that area, there should have ideally been a lot more similar cases encountered and published by the doctor fraternity. Since no such case has been reported, we believe that this is the first such case to present itself.

**CONCLUSION**

Health education should be advocated in target areas to bring about a change in the mindset of people and to make them understand the dangers of foreign body impaction, perforation and the long-term sequelae. Rigid esophagoscopy still remains the gold standard procedure for removing the foreign body from esophagus.

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**REFERENCES**

1. Ginsberg GG. Management of ingested foreign objects and food bolus impactions. Gastrointest Endosc Clin N Am. 1995;41:33-8.
2. Khan MA, Hameed A, Choudhry AJ. Management of foreign bodies in the esophagus. J Coll Physicians Surg Pak. 2004;14(4):218-20.
3. Sung SH, Jeon SW, Son HS, Kim SK Jung MK Cho CM et al, Factors predictive of risk for complications in patients with oesophageal foreign bodies. Dig Liver Dis. 2011;43(8):632-5.
4. Heger P, Weber TF, Rehm J, Pathil A, Decker F, Schenmer P. Cervical esophagotomy for foreign body extraction - Case report and comprehensive review of the literature. Ann Med Surg (Lond). 2016;7:87-91.
5. Bodkin RP, Weant KA, Baker Justice S, Spencer MT, Acquisto NM. Effectiveness of glucagon in relieving esophageal foreign body impaction: a multicenter study. Am J Emerg Med. 2016;34(6):1049-52.

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