RIGID ESOPHAGOSCOPY WITH FOLEY'S CATHETER EXTRACTION OF AN ESOPHAGEAL FOREIGN BODY: CASE REPORT FROM TAMALE

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Adjeso T, Dzogbefia M, Thompson PA. Rigid esophagoscopy with Foley's catheter extraction of an esophageal foreign body: case report form Tamale. Case Study Case Rep. 2018; 8(3): 59 - 63.

ABSTRACT

Esophageal foreign bodies (FBs) are commonly removed by rigid esophagoscopy under general anaesthesia (GA); however there are reports of the use of Foley's catheter with or without fluoroscopy to retrieve spherical or oval esophageal foreign bodies. This case report describes the successful removal of Shea nut from the esophagus by rigid esophagoscopy using Foley's catheter under general anaesthesia in a 69 year old edentulous woman.

Key words: Foley's catheter, esophagus, foreign body, Tamale

INTROUCTION

Foreign bodies in the esophagus are commonly extracted with rigid esophagoscopy under general anaesthesia [1 - 7], nonetheless spherical and oval shaped esophageal foreign bodies which are difficult to grasp have been extracted using Foley's catheter with or without fluoroscopy [8 - 9]. Other modalities include flexible esophagoscopy, esophageal bougienage and surgery [10].
Types of ingested FBs vary depending on the country, culture and even medical specialty reporting the ingestion [10]. However in children coins are the most commonly reported esophageal foreign body, whereas in adults bones, meat bolus or impaction and dentures are the most commonly encountered foreign bodies [3 – 4, 6 - 7].

This case report describes Shea nut ingestion which was successfully extracted by rigid esophagoscopy using Foley's catheter under general anaesthesia in a sixty nine year old edentulous woman.

CASE REPORT

A sixty nine year old woman presented to our facility with a history of difficulty swallowing, difficulty breathing and drooling. She started experiencing these symptoms when she accidentally ingested a Shea nut that she was sucking two days prior to presentation. She had no previous history of any esophageal disease and no known chronic illness.

Figure 1: Showing the retrieved Shea nut.

On examination the patient had a mild stridor with oxygen saturation of 95% on room air. Ear and nose examination were unremarkable. Throat examination revealed no dentition in the oral cavity with her vital signs within normal limits.
A provisional diagnosis of esophageal foreign body with airway compromise was made and patient prepared for theatre after informed consent was obtained. A 3 cm oval Shea nut was retrieved successfully from the esophagus (20cm from the upper incisor teeth) with the aid of a size 14 French Foley's catheter using a distal illuminating paediatric rigid esophagoscope (25cm) under direct vision (Figure 1). No stricture, stenosis or intraluminal esophageal lesion was seen. Patient was discharged home on the first postoperative day without any complications. Two year follow up of patient was unremarkable.

DISCUSSION

Esophageal FBs are commonly encountered in Otorhinolaryngological practice with majority occurring in children 3 years or less. However in adults ingested FBs occur more commonly among those with underlying esophageal disorders, mental retardation, psychiatric disorders, alcoholics, prisoners and edentulous elders[11].
The presentations of ingested FBs varies and are usually related to the type of foreign body ingested. These include dysphagia, odynophagia, choking, drooling and airway obstruction[11]. The successful removal of ingested FBs depends on the method used, choice of device, experience of attending physician and characteristics of the foreign body[12].
Rigid esophagoscopy is the recommended gold standard management for ingested FBs[1 – 7,11]. Other methods of management include flexible esophagoscopy, Foley's catheter extraction and esophageal bougienage, observation and surgery [10 - 11].
Foley's catheter removal technique of ingested FBs was introduced to avoid the potential dangers of general anaesthesia and endoscopy [13]. Additionally other advantages include shorter hospital stay, lower costs and ease to perform [14]. Complications however of this procedure includes perforation, aspiration and airway obstruction.
Fluoroscopic catheter removal technique were used mainly by the paediatric radiologists for removal of blunt esophageal foreign body in infants and children with a 95% to 98% success rate [13, 15 - 16]. Coins were the most common blunt radiopaque objects removed by this technique with the most common blunt non-opaque foreign body being ingested food. However it was contraindicated when there were signs or symptoms of airway obstruction, airway narrowing or sharp objects; which then mandates the use of endoscopic removal under GA [16].
We used the combination of rigid esophagoscopy under GA with Foley's catheter removal in this patient because the ingested Shea nut was blunt and the patient had signs of airway compromise. Additionally none of the available foreign body forceps could successfully grasp the Shea nut. Furthermore fluoroscopy was not used because the foreign body was non-opaque.

CONCLUSION

Rigid esophagoscopy with Foley's catheter extraction under general anaesthesia in this case was safe and effective for removing the blunt foreign body in the esophagus which was difficult to grasp with a foreign body forceps.

CONSENT

Informed consent was obtained from patient for publication and use of image.

COMPETING INTEREST

Authors declare they have no competing interest.

ACKNOWLEDGEMENT

We wish to thank Prof. Francis Abantanga, Dean of SMHS/UDS and Issaka Adamu, MD, for agreeing to read our manuscript and making useful comments and suggestions. We also wish to express our sincere gratitude to all the ENT nurses for their assistance in caring for this patient.

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