

Capping the food pipe- an unusual case of soda cap in the esophagus

Abstract

Foreign bodies of the esophagus although common, because of their potential life threatening complications present a challenge. In terms of early diagnosis and management. A peculiar case of foreign body namely soda cap is described in terms of presentation, diagnosis and management. The importance of early diagnosis and rigid endoscopic removal of sharp foreign bodies is highlighted.

Keywords: foreign body, esophagus, soda cap

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Introduction

Foreign bodies in the esophagus are common and a serious clinical condition, both in children¹ and adults.² Although most are detected early and have no residue complications, the potential for possible complications like mediastinitis³ which is associated with a high mortality and morbidity cannot be underestimated. The need for a rapid and accurate diagnosis, together with subsequent treatment is the key for a successful outcome.

Case report

A 14 year old boy presented with difficulty and pain in swallowing for 6 hours. The symptoms started whilst he was playing with a soda cap in his mouth, which he accidentally ingested. On examination there was mild tenderness on the neck and minimal drooling of saliva. The x-ray of the neck lateral (Figure 1) and antero-posterior view revealed a radio opaque foreign body in the neck, the level of which ranged from cervical vertebrae 3 to 6. The patient was taken to the emergency operation theatre and the soda cap (Figure 2) was removed using a rigid esophagoscope. There was minimal mucosal injury and the patient was started on oral feeds the next day. He has been asymptomatic at 2 months follow up.



Figure 1 Xray lateral view of the neck showing the soda cap foreign body.



Figure 2 The removed foreign body (Soda cap).

Discussion

Accidental ingestion of foreign bodies is one of the commonest emergencies in otolaryngology. The vast majority of foreign bodies pass through the gastrointestinal tract uneventfully and treatment is necessary. A large variety of foreign bodies have been reported, the common ones being coins, bones, meat bolus and dentures. The prevalence is common in the pediatric age group specially 6 months to 3 years⁴ and gradually declines as the age increases. In the adult population those who are edentulous, alcoholic or psychiatric and have structural abnormalities of the esophagus are at greater risk.³

Clinically patients present with dysphagia, odynophagia, diffuse chest pain and laryngeal irritation.⁵ Presence of respiratory signs, such as violent coughing, gagging or incomplete airways obstruction suggests FB aspiration. However in children, the history may be vague and the initial symptoms poor.¹ Such patients generally present with complications due to infection or perforation of the esophagus and have a poorer prognosis.

The diagnosis is usually confirmed by radiological assessment. Plain films (neck and Chest X-rays) are useful in diagnosing radio opaque objects.⁶ However they have low sensitivity for smaller and radio lucent objects, in such cases a CT scan is more helpful. CT scan not only confirms the presence of the foreign body it also helps to evaluate any eventual damage to the neighboring structures.⁷ The foreign body usually lies close to one of the 3 esophageal anatomical constrictions: the cricopharyngeal ring, the aortic arch narrowing or the esophago-gastric junction.

As a group, esophageal foreign bodies require early intervention because of their potential for developing complications, especially so in cases of delayed presentation and sharp objects. They cause mucosal irritation, inflammation, and perforation consequently leading to life threatening infections such as mediastinitis, aspiration, pleural empyema and deep neck infections.^{3,5}

The removal of the foreign body can be carried out by various methods, the commonest being rigid and flexible endoscopy. The choice depends on various parameters such as patient's age, clinical condition, the type, size, shape, site, number of FBs^{8,9} and the surgeons experience. Although both are equally effective and safe in removing most of the foreign bodies, rigid endoscopy is preferred for most sharp and penetrating foreign bodies.

Conclusion

An interesting and peculiar foreign body in terms of the shape of the foreign body is presented, which highlights the need for emergency removal because of the potential to cap the airway and cause respiratory obstruction. We would like to emphasize the need for multidisciplinary team approach consisting of an otolaryngologist, gastroenterologist, pediatrician/physician and cardio thoracic surgeon for the management of such complicated foreign bodies. We would also stress the need for spreading awareness amongst the population regarding ways to prevent this condition.

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Conflicts of interest

None.

References

1. Chang YJ. Foreign Body Ingestion in Children. *Annals of Emergency Medicine*. 2008;51(4):484.
2. Athanassiadi K, Gerazounis M, Metaxas E, et al. Management of esophageal foreign bodies: a retrospective review of 400 cases. *Eur J Cardio-Thoracic Surg*. 2002;21(4):653–656.
3. Von Rahden BHA, Feith M, Dittler H-J, et al. Cervical esophageal perforation with severe mediastinitis due to an impacted dental prosthesis. *Dis Esophagus*. 2002;15(4):340–344.
4. Paul SP, Hawes D, Taylor TM. Foreign body ingestion in children: case series, review of the literature and guidelines on minimising accidental ingestions. *J Fam Health Care*. 2010;20(6):200–204.
5. Sharma SB, Hong P. Ingestion and pharyngeal trauma causing secondary retropharyngeal abscess in five adult patients. *Case Rep Emerg Med*. 2012;2012:943090.
6. Sink JR, Kitsko DJ, Mehta DK, et al. Diagnosis of Pediatric Foreign Body Ingestion: Clinical Presentation, Physical Examination, and Radiologic Findings. *Ann Otol Rhinol Laryngol*. 2016;125(4):342–350.
7. Tseng HJ, Hanna TN, Shuaib W, et al. Imaging Foreign Bodies: Ingested, Aspirated, and Inserted. *Ann Emerg Med*. 2015;66(6):570–582.
8. Singh B, Nijhawan S, Narayan KS, et al. Endoscopic management of ingested foreign bodies and food impaction in esophagus. *J Dig Endosc*. 2015;6(3):96–100.
9. Sahn B, Mamula P, Ford CA. Review of foreign body ingestion and esophageal food impaction management in adolescents. *J Adolesc Health*. 2014;55(2):260–266.