

CASE REPORT

LATE PRESENTATION OF SWALLOWED DENTURE IN LOWER CERVICAL ESOPHAGUS WITH PERFORATION-SUCCESSFUL EXTRACTION WITH PRIMARY REPAIR

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ABSTRACT

Foreign body ingestion is a commonly seen in Emergency rooms. Children are notorious for ingesting coins while adults presenting with meat and fish bone ingestion history are a common occurrence. However elderly population is commonly seen presenting to the ER with history of ingestion of dentures while having meals. Endoscopic retrieval is the preferred method of treatment however for

cases with multiple attempts resulting in failure, surgical removal is the only solution. Our patient presented with history of an impacted denture in the esophagus which was successfully retrieved surgically.

KEYWORDS

Denture, Foreign Body, lower esophagus

CASE SUMMARY

58-year-old man with no comorbidities presented to the ER with history of swallowing his denture. Two rigid endoscopes were attempted at local hospitals but with no success. At the time of his presentation to our emergency department, he was hemodynamically stable with lower neck tenderness on the right side. He was admitted, and informed consent was taken for surgical exploration. Under General Anesthesia, incision was made along the right sternocleidomastoid muscle and dissection was done up to the esophagus. Denture was identified which was eroding through the lateral esophageal wall. Pus was cultured and with linear esophagotomy, the denture was removed. Esophageal wall was then closed with interrupted PDS sutures. Postoperative course was unremarkable. Esophageal swallow was performed on the seventh postoperative day which showed no leakage.

the impacted dental prosthesis is a hinderance in detection and diagnosis . For removal of impacted bodies rigid and flexible esophagoscopes have been in use however no clear definition is present for open surgical retrieval of these foreign bodies. A large number of foreign bodies tend to pass spontaneously, 10% may be treated conservatively and 1 % cases will require surgical management.³ Ingestion of dental prosthesis can have significant complications such as mediastinitis or fistula formation, so it requires urgent treatment and removal.⁴ Most of these foreign bodies can be removed endoscopically .However endoscopy may fail at times thus requiring surgical intervention .

DISCUSSION

Foreign body ingestion is a very common and serious otolaryngologic emergency. Foreign bodies are usually impacted at areas of physiological narrowing, angulations, and strictures.¹ No specific age relation is seen. Batteries, such as coin and alkali, are among common ingestions in children whereas in adults, meat and fish bones are common foreign bodies.² In elderly suffering from dementia, dental prosthesis are a nuisance.³ Radiolucency of

Here we describe a case of impacted dentures where our patient required surgical removal after failed endoscopic attempts. Treatment depends on the type of dentures and the place it is impacted in. The history dates back to 1937 when Jackson and Jackson presented rigid endoscope for treating upper airway and esophageal foreign bodies.⁵ Rates of successful removal of a foreign body through a rigid endoscope is 94-100% whereas for a flexible endoscope is between 76-98.5%.¹ Esophageal perforation with rigid endoscope has an incidence of 0.34 % with a 0.05 % mortality rate.⁶ Use of medications like

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benzodiazepines and calcium channel blockers, which help in relaxing lower esophageal sphincter, have also been describe.⁷ Due to an increase rate of successful removal of impacted foreign bodies, endoscopic removal is the preferred treatment option.⁷ Some cases, like the one we have described, still require surgical intervention. Different surgical approaches including cervicotomy, thoracotomy or gastrotomy can be performed according to the location of the foreign body. In our patient, the impacted denture was in the esophagus and had pierced the mucosal wall. The denture wires had also pierced through esophageal walls and could be seen protruding extraluminally during exploration.

CONCLUSION

In cases where there is a history of long term impaction of foreign bodies or where sharp impaction has occurred and one cannot visualize completely through rigid endoscopy, we recommend trans cervical esophagotomy for their retrieval. The decision for open procedure is much safer in such cases than further attempts made with an endoscope as it can lead to further morbidity. High index



of suspicion should be kept for elderly or debilitated patients who present in ER with unexplained symptoms of chronic cough and difficulty in swallowing.

Figure. 1-5 Successful extraction of Foreign body



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