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SUCCESSFUL ENDOSCOPIC REMOVAL OF A SWALLOWED TOOTHBRUSH: CASE REPORT

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ABSTRACT

Most of the foreign bodies that are ingested accidently passes through the gastrointestinal tract without causing any complication. But foreign bodies that are rigid and long have high chances of gastrointestinal complication like perforation, foreign body impaction and bleeding. So, the removal of such foreign bodies is strongly recommended before any of above-mentioned complication develops. This is a case report of a 54-year-old Man who swallowed the toothbrush accidently. The previously reported cases of tooth brush removal was usually in patients with Bulimia and other psychiatric illness. The toothbrush from this Gentleman was removed successfully with the help of flexible endoscopy and polypectomy snare. Removing such long and rigid foreign body is a special challenge. Morbidity and mortality is significantly reduced when such foreign bodies removed urgently. In case of Failure of endoscopic removal, Laparoscopic surgery may be an alternative approach.
Key Words: Foreign Body ingestion, Toothbrush, Endoscopic Removal.

INTRODUCTION

Most of the foreign bodies that are ingested accidently passes through the gastrointestinal tract without causing any serious complication [1, 2, 3, 4]. As the duodenal C-loop is fixed retroperitoneally, so most of the foreign bodies that are longer than 10 cm, like toothbrush, fails to pass though it [2]. So removing such Foreign bodies through Flexible endoscope immediately to avoid any complication is strongly recommended [5, 6, 7]. Laparoscopic surgery is indicated in case endoscopic removal fails or any complication develops [8].

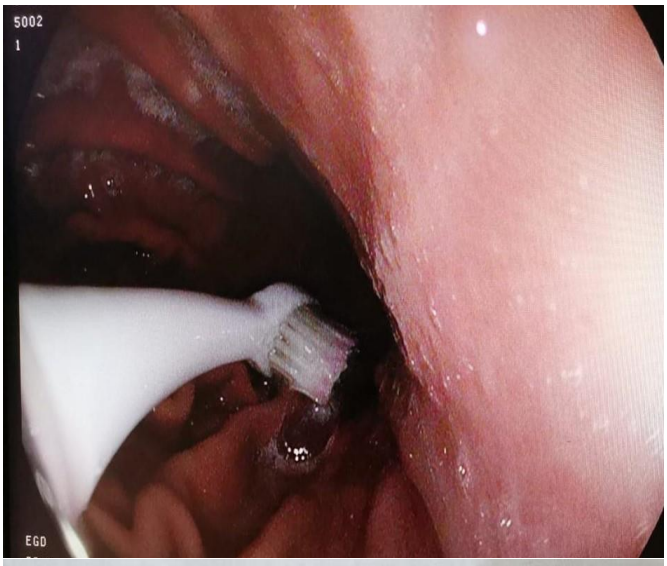
CASE REPORT

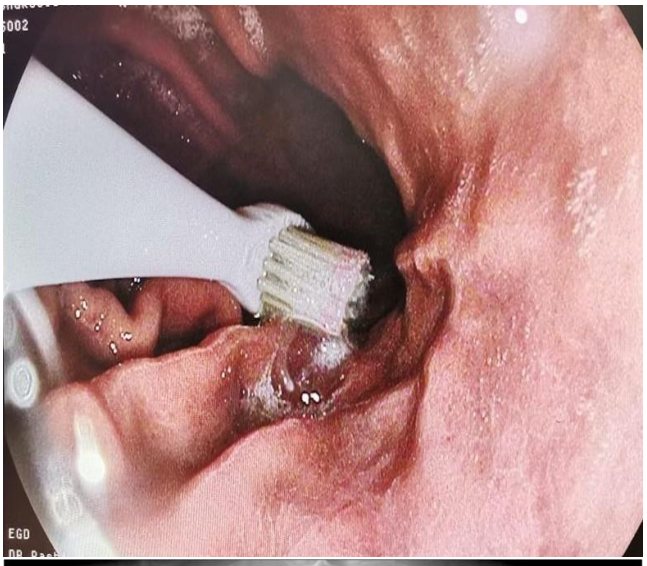
A 54 years old male patient policeman by profession presented early morning in Gastroenterology OPD with History of accidental swallowing of his tooth brush will brushing the teeth. He was otherwise well with no previous co-morbids or psychiatric history but appeared annoyed because of the fact that his family members were not believing that anybody could swallow a toothbrush, and it took the patient a considerable time and effort to convince the family to accompany him to hospital.

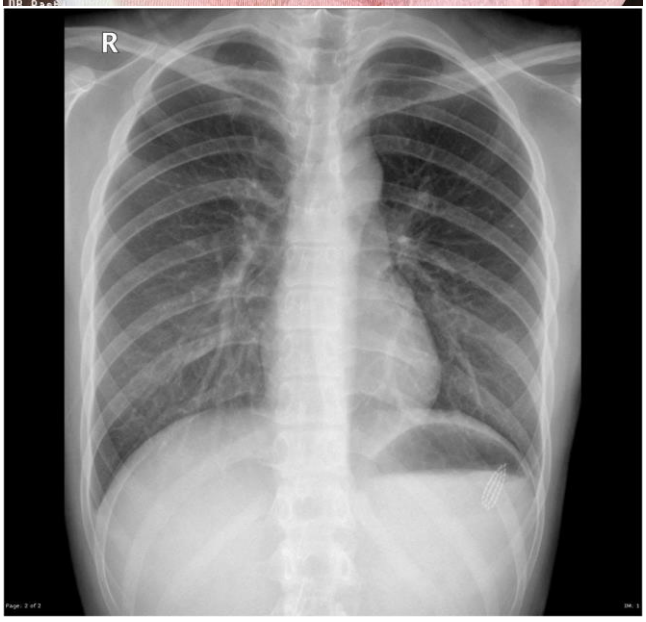
He admits using the tooth brush to clean his hard palate and holding tooth brush in vertical axis. On clinical examination vitals were all normal and abdominal examination soft non tender abdomen. After initial assessment plan was made for upper GI endoscopy and proceed and as patient did not had breakfast so immediate endoscopy was planned under conscious sedation.

Informed written consent was obtained from the patient. Tooth brush was identified in the stomach. End of tooth brush was grasped with the help of snare and scope was gently withdrawn. Slight resistance was felt at UES however brush was pulled out with hand as soon as it reached oral cavity.

Total time consumed throughout the procedure is 8 minutes and entire procedure went uneventful. The Toothbrush that was extracted was 18 cm in length. Patient was observed for 8 hours and then was discharged in stable condition.







DISCUSSION

Majority of the foreign bodies that are not digestible can pass through the gut without causing any major complication [2]. More than 80% of the Foreign bodies in the stomach pass through the gastrointestinal tract easily [1, 2, 3]. As the duodenal C-loop is fixed retroperitoneally, so most of the foreign bodies that are longer than 10 cm, like toothbrush, fails to pass though it [2]. So removing such Foreign bodies through Flexible endoscope immediately to avoid any complication is strongly recommended and it depends mainly on the overall condition of patient and expertise of the Endoscopist [2, 3, 4, 5]. Laparoscopic surgery/ surgical gastrostomy is indicated in case endoscopic removal fails or any complication develops. For removing a foreign body like toothbrush from patients stomach, conscious sedation is used. Special dedication is needed to extract the toothbrush alongside the alignment of esophagus specially when

pulling it through GEJ otherwise complication like impaction and mucosal injury may happen. Then next very critical phase starts when toothbrush has to be extracted out from the oropharynx, patient was asked to extend the neck backward and the endoscopist has to pull the toothbrush with his hands carefully.

This case report describes a successful extraction of toothbrush endoscopically from patient's stomach using a polypectomy snare. Total time consumed throughout the procedure is 8 minutes and entire procedure went uneventful. The Toothbrush that was extracted was 18 cm in length. Patient was observed for 8 hours and then was discharged in stable condition.

CONCLUSION

Early removing of rigid and long foreign body from the stomach endoscopically is very important to lowers the risk of complication like Impaction, perforation or bleeding. Removing such long and rigid foreign body is a special challenge. Morbidity and mortality is significantly lesser when such foreign bodies removed on urgent basis. In case of Failure of endoscopic removal, Laparoscopic surgery may be an alternative approach.

DISCLOSURE STATEMENT

The authors have no conflicts of interest to declare.

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