



A STUDY ON UPPER GI FOREIGN BODY PRESENTATION AND MANAGEMENT IN A TERTIARY CARE CENTRE

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ABSTRACT

Aim: To evaluate the presentation and out come of accidentally ingested foreign bodies of upper GI tract.

Methods: Retrospective analysis of patients with GI foreign bodies from 2014 to 2017 in the Department of Medical Gastroenterology, Government Mohan Kumaramangalam Medical college, Salem, Tamilnadu. Patients age, sex, type of objects, site of objects, time of presentation to hospital, associated comorbid illness endoscopic accessories used, failed rate, negative endoscopy, complications, and surgical requirements were analysed.

Observation: Total 51 patients pediatric 16 (31.3%), male 24 (47.05%) and female 27 (52.9%). Dentures were the common foreign body encountered in esophagus 13 (25.4%), Sharp objects, 8 (15.6%). youngest age was one year old male child. oldest was 75 year old male. Two cases of button battery removed under GA. Esophagus was the commonest site. Rat tooth foreign body forceps used in 37 cases (72.5%). Snare was used in 7 cases (13.7%). Endoscopic removal 44 (86.2%) Negative endoscopy 3 (5.8%) ENT region impaction one. No endoscopic complication. Surgical removal 4 cases (7.8%).

Conclusion: Most of Upper GI foreign bodies were removed by flexible endoscope by using endoscopic accessories with relatively low failure rate and low surgical requirement.

KEYWORDS : Upper GI Foreign body, Tertiary care centre, Therapeutic endoscopy

Background:

Gastrointestinal foreign bodies (GIFB) are one of the common problems faced by gastroenterologists. Most of the situation resolve without serious complications.^[1] Previous studies revealed that between 1500 and 2750 deaths occurred in the USA secondary to GIFBs.^[2] Recent studies have pointed that the mortality from GI foreign bodies to be significantly lower, with no deaths reported in over 850 adults and only one death in approximately 2200 children with GI foreign bodies.^[3] Irrespective of the morbidity and mortality rates, serious complications and deaths occur as a complication of foreign body ingestions. Foreign body ingestion is a common problem through out the world with children comprising 80% of cases between ages 6 months and 3 years. Commonly foreign bodies pass harmlessly through the GI tract. Pediatric cases with pre-existing GI malformation are at increased risk. GI foreign bodies may be ingested unintentionally or intentionally. Because of the curiosity children results in ingestion of the foreign body. Coins are the most frequent objects swallowed by children but other objects include marbles, toys, crayons, nails, button batteries and pins.^[4] Unintentional ingestion can also occur in adults with dentures because of lack of sensation during deglutition. Patients with altered sensorium and psychiatric illness, including the very old, demented, or intoxicated, are at risk for accidental foreign body ingestions. Unintentional coin ingestion was noted in teenaged adults during drinking game where coin get impacted in esophagus. In certain occupations such as carpenters and tailors risk of accidental ingestion when nails or pins are gripped in the mouth in the process of their work. Foreign bodies during investigational procedures are increasing from capsule endoscopy, stents migration. Foreign bodies which likely get impacted or associated with toxicity must be identified early and removed. Food impaction is the most common GI foreign which needs emergency care in developed as well as developing countries. In these cases most frequently underlying esophageal pathology such as peptic strictures, Schatzki's rings, and, increasingly, eosinophilic esophagitis, can be made out.^[5] Other causes include anatomical alterations due to surgical interventions. and dysmotility disorders. Geographical dietary habits influence GIFBs. Fish bone injury is common in Asian countries and the Pacific rim, whereas impactions

caused by meats, including hot dogs, pork, beef, and chicken, are common in the United State.

Aim:

To evaluate the presentation and out come of accidentally ingested foreign bodies of upper GI tract.

Methods:

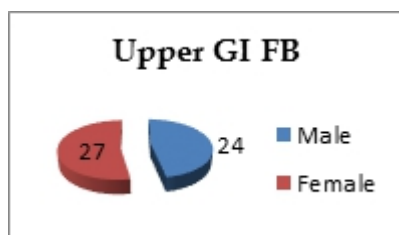
Retrospective study. Patients records of ingested GI foreign bodies from January 2015 to June 2017 in the Department of Medical Gastroenterology, Government Mohan Kumaramangalam Medical college, Salem, Tamilnadu were analysed. Patients age, sex, type of objects, site of objects, time of presentation to hospital, associated comorbid illness endoscopic accessories used, failed rate, negative endoscopy, complications, and surgical requirements were considered for the analysis. Pentax flexible video endoscopic system was used. C arm was used to identify the site and nature of the foreign body whenever required. Most of the procedures were conducted in the department endoscopy suite with topical anesthesia. Especially for pediatric cases where general anesthesia was required. The procedure were conducted in operation theatre within the speciality block so that the time delayed was avoided.

Observation:

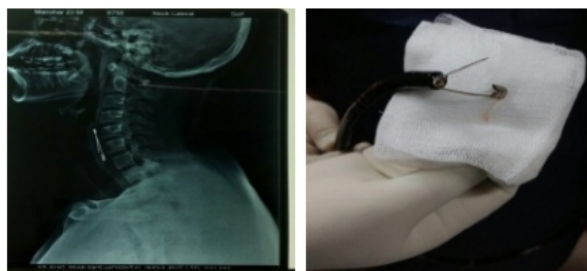
Total number of cases were 51. The number of pediatric cases from age one year to 12 years were 16 (31.3%). Male cases were 24 (47.05%) and female were 27 (52.9%). Dentures were the common foreign body encountered in esophagus 13 (25.4%), Sharp objects, 8 (15.6%) 14 cases of coin foreign body were seen and recovered. 13 cases of meat impaction were removed. Youngest age was one year old male child with ingestion of coin which was removed under general anesthesia. oldest was 75 year old male. Two cases of button battery removed under GA. Most of the cases were managed under topical anesthesia. Esophagus was the commonest site. Apart from esophagus foreign bodies were recovered from Stomach and second part of duodenum. As far as the co morbid illness cardiac fitness was obtained for individuals more than 40 years of age. The complications due to co morbid illness were experienced in none of the cases. Rat tooth foreign body forceps used in 37 cases (72.5%).

Snare was used in 7 cases (13.7%). Endoscopic removal 44 (86.2%) Negative endoscopy 3 (5.8%) Cricopharyngeal region impaction one. No endoscopic complication. Surgical removal 4 cases (7.8%).

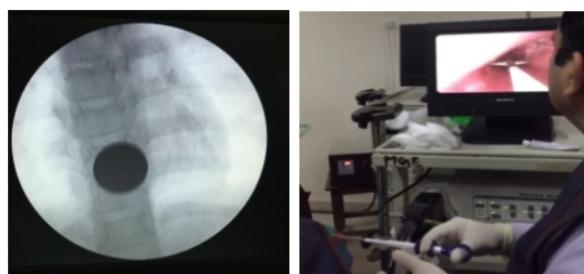
Graph:1



Picture:1 Safety Pin removal



Picture:2 coin removal



Discussion:

Gastrointestinal food impactions and foreign bodies were removed using mainly with flexible endoscopes because it is safe and high success rate.. Many studies have shown that efficacy for endoscopic treatment of foreign bodies were more than 95%, less complication^[6]. In our study also the success rate is 86.2%. The risk for Sharp objects are associated with more complication than blunt objects. Most of the FBs pass through the GI tract without complication spontaneously. Foreign bodies lodged in the esophagus need endoscopic intervention without time delay. The complication of the retained foreign body in esophagus is proportional to the time delay to recover.^[7] In our study most of the FBs were seen lodged in esophagus and removed as early as possible resulting in no complications. The FBs in esophagus should be removed within 24 hours^[8].. The sedation used for removal of FBs should be individualized. In most instances we used topical anesthetic gel which enabled cooperation from the patient. In our study 2 cases of button battery removed under anesthesia and both were pediatric age group for want of cooperation. The knowledge regarding multiple endoscopic retrieval devices for the removal of foreign bodies is crucial. We used rat toothed forceps in 37 cases and snare in 7 cases. Only 4 (7.8%) cases were referred for surgical removal because of failed endoscopic procedure.

Conclusion:

Most of Upper GI foreign bodies were removed by flexible endoscope by using endoscopic accessories with relatively low failure rate and low surgical requirements

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