

An Exceptional Foreign Body in the Stomach

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Abstract

Foreign body ingestion is a common event that occurs most often in children who account for 75 to 85% of patients; and in psychiatric patients. In adults it is uncommon and usually happens accidentally where these bodies are ingested together with food. The most common foreign bodies accidentally ingested by adults are bones; especially fish bones 9-45% and less commonly dentures 4-18% whereas Children commonly ingest toys and small coins. Most of such foreign bodies pass through gastrointestinal tract uneventfully and rarely cause obstruction or perforation unless a context of pathological change of the digestive tract exists. These changes include strictures; malignancy; esophageal rings and achalasia. We hereby present an unusual and interesting case of a 51-year-old male patient in whom endoscopic removal from the stomach; of an endotracheal tube; was carried out.

Keywords: Foreign body; Endotracheal tube; Weight loss; Endoscopic removal; Stomach

Introduction

Foreign body ingestion is a common event that occurs most often in children who account for 75 to 85% of patients; and in psychiatric patients. In adults it is uncommon and usually happens accidentally where these bodies are ingested together with food. The most common foreign bodies accidentally ingested by adults are bones; especially fish bones 9-45% and less commonly dentures 4-18% whereas Children commonly ingest toys and small coins.

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Case Report

A 51-year-old male patient with unnoticed past medical history; who underwent cholecystectomy 2 years ago at another hospital; presented to the emergency department of our institution with his chief complaint being an epigastric pain; associated with repeated vomiting. The patient claimed that he began to suffer from abdominal pain about 1 year ago but he used to take pain reliever medications and antiemetic to get well. Two weeks ago the situation deteriorated as he suffered from repeated greenish vomiting occurring after meals; his pain increased in intensity and wasn't relieved by medications anymore; but passage of flatus and stools was normal [1-6].

On examination; the patient was afebrile; but mildly agitated because of his pain. His abdomen was soft with a severe pain in the epigastric region; no palpable masses were noticed. The rest of the exam was otherwise unremarkable.

The patient was admitted; treated by intra venous antiemetics; antispasmodics and PPI. We noted normal routine blood tests. The chest x-ray showed an unknown radio-opaque object in the stomach (Figure 1).

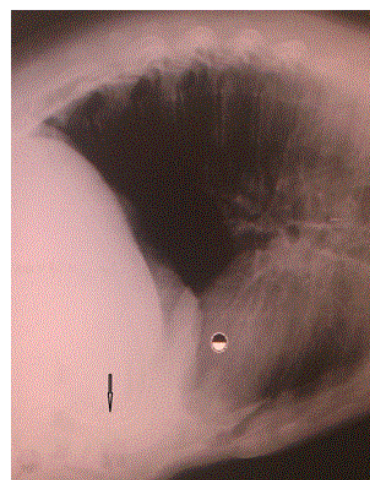


Figure 1: Radio-opaque object in the stomach.

The patient underwent an upper GI endoscopy under intravenous sedation; which showed an endotracheal tube in the gastric body with the rest of it impacted in the pylorus (Figure 2). First; an attempt was made to remove the tube with a foreign body forceps; but it continued to slide. The second alternative was the polypectomy snare which was useful to dislodge the tube from the pylorus and pulling it to the proximal esophagus without any injury to the stomach or esophagus. At the cricopharyngeus muscle level; travel of the foreign body was again impeded; thereby the situation required laryngoscopy with a Magill forceps which helped in the removal of the tube from the

pharynx with minor bleeding in the upper esophagus. The tube length was 22 cm with an internal diameter of 8.5 mm (Figure 3).

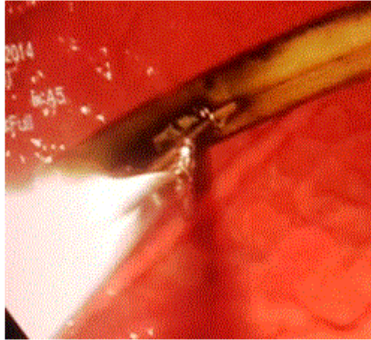


Figure 2: An endotracheal tube in the gastric body with the rest of it impacted in the pylorus.



Figure 3: Tube length was 22 cm with an internal diameter of 8.5 mm.

Discussion

Naturally; 80-90% of ingested foreign bodies that reach the stomach pass through the gastrointestinal tract without intervention. 10-20% must be removed endoscopically; whereas surgery is required in approximately 1% of cases [7].

Clinical management is based on knowledge of the chemical properties; the size; the location and the sharpness of the foreign body [3,5,8].

The passage through the duodenum depends on the length as well as the diameter of the foreign body. A length greater than 6 cm with a diameter of more than 2.5 cm makes the passage more difficult through the duodenum due to its fixed retroperitoneal position [8]. Conservative management is the best approach for short <6 cm and narrow <2.5 cm objects where spontaneous passage is expected without any intervention within one week. Endoscopic removal is indicated if the foreign body is longer than 6 cm; proximal to the first portion of the duodenum and/or wider than 2.5 cm. Surgical removal should be considered if objects remain in the same location distal to the duodenum for more than 1 week [3,5,8].

In case of coins; endoscopic removal is indicated if they remain longer than 12-24 hours in the esophagus; or 3-4 weeks in the stomach in an asymptomatic patient [1,8].

The pointed foreign body is always more difficult to pass spontaneously than the rounded one. Sharp and sharp-pointed objects in the esophagus; stomach or duodenum; require urgent endoscopic removal. Surgical intervention should be considered when endoscopic treatment fails; and if the sharp body beyond the duodenum ceases to progress radiographically for 3 consecutive days [8].

Emergent endoscopic removal is indicated for a suspected disk battery discovered in the upper gastrointestinal tract. Laparotomy should be considered if it appears that the passage of the battery in the bowel has been arrested [7].

The presence of bezoars needs always endoscopic disruption and removal of the mass. However many bezoars require surgical treatment [7,6,9-12].

Concerning narcotic packets; endoscopic removal is relatively contraindicated due to the risk of rupture and contents leakage. Surgery is only indicated when drug packets fail to progress or if there is an intestinal obstruction [7].

Unusual foreign bodies such as an ingested toothbrush [10], speaking valve [8] and endoscopic capsule [5]; removed endoscopically or by surgical intervention were reported in the literature.

Our case is an uncommon complication. The circumstances leading to this medical malpractice are not clear and whether the intubation was done by an inexperienced medical staff or not; is not exactly known. The tube could have been removed immediately but this didn't happen; and during these two years; the patient went seeing several specialists who didn't even think to do an abdominal imaging.

The difficulty to pass through the duodenum is due to the length of the endotracheal tube (more than 6 cm) and to the rigidity of duodenal intestinal part. This kind of foreign body carries a high risk of perforation. Weight loss is due to the pain and to the blockage of the endotracheal tube into the pylorus; thus reducing the intake of nutrients. The tube removal was carried out with a difficulty to pass through the cricopharyngeus muscle; the condition then required using a laryngoscope and a Magill forceps.

A few cases were reported in the literature on the treatment for removal of an endotracheal tube in the esophagus following intubation [2,4,13], and in one case, the tube was impacted in the stomach; therefore requiring surgery after unsuccessful endoscopic removal.

We report this case; to raise awareness of the danger of accidental esophageal intubation in the operating rooms as it is still a major cause of morbidity and even mortality.

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