Foreign body; Endoscopy; Retrieval device; Overtube; Stomach

Introduction

Foreign bodies ingestions is a commonly encountered emergency in the endoscopic department. Most objects pass through the upper gastrointestinal (GI) tract spontaneously, but 10%-20% of ingested foreign bodies need endoscopic or surgical removal [1]. Here, we report an unusual large foreign object lodged in the stomach for nearly a week, which was safely removed by endoscopy fortunately.

Case Report

A 34 year-old single man with a history of drug abuse presented to the endoscopic center accompanied by his mother. He swallowed a huge spring with hooks which made him a winner of a bet with his friends on July 16, 2015. He had no complaints of abdominal pain, nausea, odynophagia, dysphagia, chest pain or reûux. He was at home until the bet was known by his mother Žve days later. He was taken to the hospital by his mother on July 22, 2015. On initial presentation, the patient talked little and denied any symptoms. Physical examination was normal except mild abdominal tenderness to moderate palpation without rebound tenderness or guarding. Laboratory results were normal except the positive anti-HCV. An electrocardiogram and the X-ray of chest showed no abnormal signs. The abdominal plain radiography revealed a large spring with a hook at both ends in the stomach, which measured approximately 18cm X 2cm, and there was no radiographic evidence of perforation (Figure 1). CT scanning conŽrmed the uncle added esophageal varices. Considering the potential risks of the upper endoscopic procedure, including the possibility of esophageal and/or gastric perforation, mucosal injury and bleeding, the inability to retrieve the foreign body, the patient and his mother insisted on the decision to attempt the endoscopic removal of the spring and the written consent was signed by both the patient and his mother. The patient underwent a upper endoscopy under conscious sedation using propofol and sufentanil without endotracheal intubation. Cardiopulmonary function was monitored with pulse oximetry throughout the procedure. The foreign body was located in the gastric body with its hooks embedded in chime (Figure 2). After irrigation with the saline, the hook of the proximal end was exposed, which was easy to be grasped by the alligator forceps which was passed through the accessory channel. It was easy to pull the spring into the esophagus without obstruction, but it was diXcult to pull out through the pharynx. After multiple attempts, it was Žnally retrieved with the endoscope and the alligator forceps holding the foreign body together (Figure 3).

On repeat endoscopic examination, minor mucosal injuries were found on the upper esophageal wall and pharynx without active bleeding. The patient refused to stay in the emergency room for further observation and left the hospital.

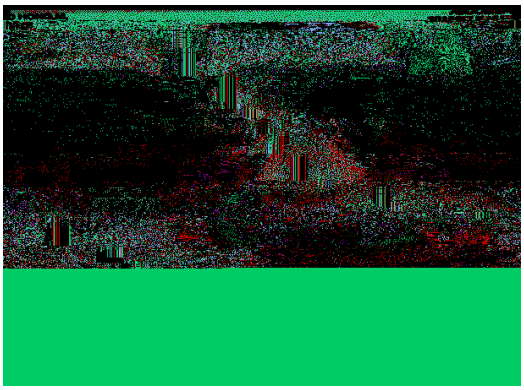

Figure 1: No radiographic evidence of perforation.

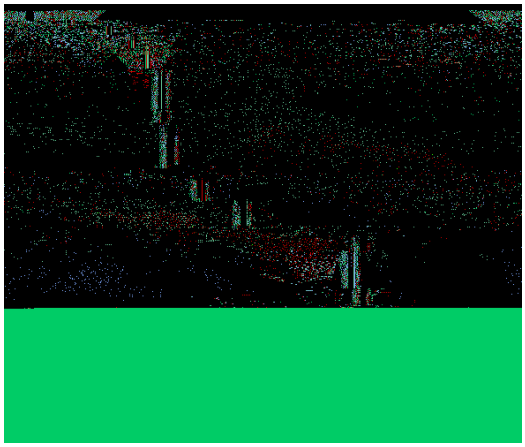

Figure 2: Foreign body was located in the gastric body with its hooks embedded in chime.

Figure 3: Alligator forceps holding the foreign body together.

Discussion

Foreign objects ingestion occurs more commonly in the pediatric population,, which peaks in children aged six months to six years [2]. The ingestion of foreign bodies is rarely seen in adults, accounting for 20% of these emergencies, which generally accidental and commonly seen in the form of food (meat and bones) ingestion [3]. Patients who purposely swallow a true foreign body (nonfood object) typically are younger and more oven male; associated psychiatric illness and/or drug abuse are common [4] The patient in this case admitted the history of drug abuse and may had a little depression which caused him to draw out the venous indwelling needle and refuse further observation aner awake from the general anesthesia. Clinical presentations aner foreign bodies' ingestion depends on types and location of foreign bodies. Yao et al. [5] revealed that the most frequent symptomatic complaint aner foreign bodies' ingestion was odynophagia (36.5%). Most of the ingested foreign bodies were located in the upper esophagus. Thirty-four patients did not complain of any symptoms aner foreign body ingestion and were classiZed as asymptomatic patients in contrast to symptomatic patients (= 192). Among them, foreign bodies were most commonly located in the stomach and duodenum when found (17/34; 50%). The foreign body of this patient was very large (18cm m i γκΜοΜm i Òmb l¾lD fhbeer

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