



Small Intestine Perforation: A Case Report

KEYWORDS

Perforation, Peritonitis, Foreign Body Ingestion

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ABSTRACT Foreign bodies, accidentally ingested, mostly pass through the gastrointestinal tract without any consequences. We are presenting an interesting case of perforation caused by nasogastric with a 36 years old man. The patient was admitted with a primary diagnosis of RLQ pain and was taken to operating room for appendectomy but not was appendix turgid. In further investigations into the abdomen a jejunum perforation was found to have been caused by a foreign body. After extraction, it was determined as part of nasogastric tube. After he came round, was asked from him about it and he said: "He went into a coma from an accident 15 years ago. Oral gastric tube was placed in the hospital for him. Gained consciousness after the catheter was bitten and swallowed. During this time (15 years) sometimes had abdominal pain but he has not told anyone. The lack of history of ingestion and that of nasogastric tube detection preoperatively is considerable in differential diagnosis of acute abdomen, which in this case was treated surgically.

Introduction

Foreign body ingestion is rare in adult. Intestinal foreign bodies usually cause no harm and are evacuated spontaneously without treatment. Nasogastric tube ingestion is rare, but is likely to cause severe damage to the gastrointestinal (GI) tract, regardless of size. Cases of an ingested nasogastric tube causing intestinal fistula formation or perforation, leading to intestinal obstruction have been documented; however, there are few reports of nasogastric tube ingestion causing intestinal volvulus and perforation in adult.

Presentation of the case

A 36-year-old man was admitted to mosabn-e- jafar hospital with a 1-day history of abdominal pain and bilious vomiting. He had been diagnosed as having anorexia, too. He had taken no medication. On examination, his abdomen and rigid with muscle guarding and sever rebound tenderness. His bowel sound was weak. His vital signs were: pulse rate = 50/min, blood pressure = 100/60 mmHg, respiratory rate = 21/min and temperature = 37°C.

He hospitalized with primary diagnosis of pain in right lower quadrant (RLQ) region at emergency ward. Emergency surgical consultation was done. Base on clinical signs and symptoms and the significant laboratory results were as follows: white blood cell count 13500/ μ l, neutrophill= 85%, platelet= 263000/ μ l and urinalysis was normal and without blood), he was been NPO. A nasogastric tube for drainage was inserted. Then intravenous line was inserted and injected ceftriaxone and metronidazol.

The patient was prepared for appendectomy and transferred to operating room but almost appendix was normal (at congestive phase with fibrin excretion). Thus we performed an emergency explorative laparotomy in general anesthesia which revealed jejunum segment perforated

5mm. A foreign body with length 22cm that in fact was a piece of nasogastric tube. That was been very dark and stiffness. We repaired the perforation and performed antrotomy. Intraoperative findings revealed diffuse purulent peritonitis that was drained completely. The patient was treated with a successful operation, and no postoperative complications were observed.

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Discussion

Foreign bodies accidentally ingested mostly pass through the gastrointestinal tract without any consequences (2). The most common objects are dentures, fish bones, chicken bones, toothpicks, and cocktail sticks. A very small percentage perforates the GI tract, which may occur from mouth to anus. A definitive preoperative history of foreign body ingestion is uncertain (1). Small bowel perforations by foreign bodies are rarely diagnosed preoperatively because clinical symptoms are usually non-specific and mimic other surgical conditions, such as appendicitis and caecal diverticulitis (3). Greater risk of perforation occurs at extreme ages, in those wearing dentures and orthodontic appliances (4), in patients with previous bowel pathology, or in alcoholic and psychiatric patients (5,6).

The risk of perforations is related to the length and the sharpness of the object (7). Most perforations occur at the narrowing and angulations of the GI tract (8).

The clinical presentation includes peritonitis, abdominal abscess formation, enterovesical fistulas, intestinal obstruc-

tions, and hemorrhage (2). The most common preoperative diagnoses were acute abdomen of uncertain origin (4). Our patient had a clinical presentation of acute abdomen with a suspicion of duodenal perforation.

Patients with foreign bodies' perforations in the stomach, duodenum, and large intestine were significantly more likely to be fibril, to have chronic symptoms, to have a normal total white blood cell count, and to be asymptomatic or present with an abdominal mass or abscess, compared to those with foreign bodies perforations in the jejunum and ileum (1).

The treatment usually involves resection of the bowel, although occasionally repair has been described (8). The lack of conditions pre-disposing accidental ingestion of foreign bodies and no specific history of foreign bodies are of interest in these cases (9).

During laparotomy we found diffuse purulent peritonitis. . A foreign body with length 22cm and size 18" that in fact was a piece of nasogastric tube. That was been very dark and stiffness. We repaired the perforation and performed antroty. The postoperative treatment went well.

Conclusion

Intestinal perforation by a nasogastric tube is very rare. The lack of history of ingestion and of detection of nasogastric tube preoperatively is of interest to be considered in the differential diagnosis of acute abdomen, which in this case was treated surgically.

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