Gastric outlet obstruction

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Foreign-body ingestion in adults is relatively uncommon. Unintentional ingestions are usually those of meat or fish bones. Concurrent alcohol consumption is often a contributing factor. Intentional ingestions are more common occurrences in those who are intellectually impaired, have psychiatric illness, are prisoners or are edentulous.[1,2]

Previously published guidelines have demonstrated that 80%–90% of foreign bodies reaching the gastrointestinal tract will pass spontaneously, 10%–20% require endoscopic intervention and 1% require a surgical procedure.[1,2]

We present a case of gastric outlet obstruction, unusual in that it was caused by intentional ingestion of a large foreign body.

Case report

A 31-year-old man presented to the emergency department after swallowing a 45-cm long, 2.5-cm diameter double-ended dildo. As there was a shoelace securely attached to the object, the patient had attempted to retrieve the object himself but was unsuccessful.

The patient appeared to be in mild distress with a shoelace hanging out of his mouth. His abdomen was moderately distended but not tender. Radiographs confirmed the presence of a large object in the stomach extending into the proximal duodenum (Fig. 1).

An attempt at endoscopic removal was unsuccessful because one end of the dildo abutted the fundus of the stomach. The patient underwent gastrotomy to retrieve the offending object. He had recently eaten, so he had a full stomach. The foreign body was traversing the pylorus causing duodenal obstruction. There was no evidence of gastrointestinal perforation or necrosis. Apart from a minor wound infection, the patient had smooth recovery. He returned approximately 12 weeks later with acute abdominal pain secondary to gallstone pancreatitis.

Discussion

Management of foreign-body ingestion is influenced by the patient's age and clinical condition, the size, shape and classification of the ingested material, the anatomic location in which the object is lodged and the technical abilities of the endoscopist.[3] Many reports discuss

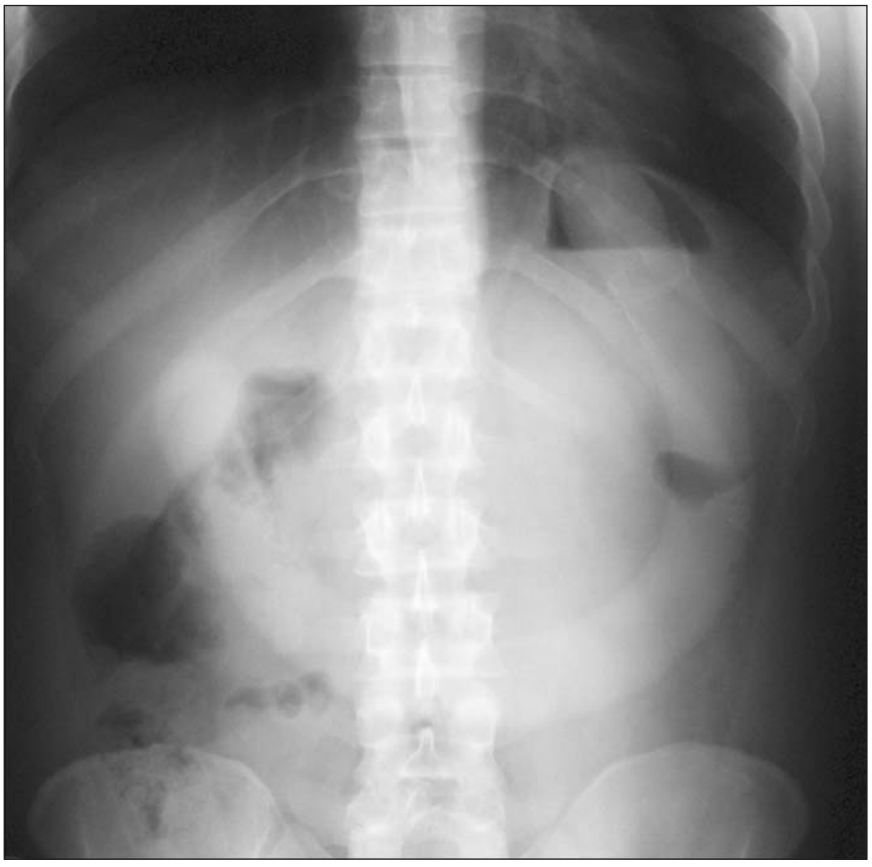

FIG. 1. Radiograph demonstrating a large foreign object in the stomach, extending into the proximal duodenum.

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the challenges of retrieving "sharp" foreign objects, but the difficulty in managing large foreign objects is less well described.

If a foreign body reaches the stomach, it will likely pass without incident. However, there are 3 sites where an object may fail to pass once it has negotiated the esophagus: the pylorus, the duodenal C-loop and the ileocecal valve. Objects longer than 5 cm, or more than 2.5 cm in diameter will have difficulty passing through the pylorus. Objects more than 10 cm long, such as a toothbrush or a spoon, cannot negotiate the duodenal C-loop secondary to its fixed retroperitoneal position. In either case, these objects should be endoscopically removed as soon as possible to avoid pressure necrosis and gastric perforation.[4] If endoscopic removal fails, surgery is warranted. Finally, if the object successfully passes these potential obstruction points, it can get lodged at the ileocecal valve, the narrowest portion of the small bowel. Surgical intervention may be required if it has not passed within a week or if the patient becomes symptomatic.[3]

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References

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