

Endoscopic foreign body retrieval using laparoscopic shears after gastrostomy

To the Editor,

An 89-year-old woman with dementia and chronic renal failure presented with abdominal fullness and vomiting. Abdominal radiography and computed tomography (CT) showed stomach distension and gas accumulation in the small bowel.

Endoscopy revealed the presence of foreign bodies in the stomach, which was filled with a large volume of food (Figure 1). These foreign bodies were considered to cause intermittent gastric outlet obstruction. We tried to retrieve one of them with a polypectomy snare, but found it difficult because it had become a hard mass. Thus, we forcefully pulled it out of her mouth, causing a deep laceration in the lower esophagus. Subsequent chest CT scan revealed no pneumomediastinum. The foreign body was found to be a disposable plastic glove that was hardened by the gastric juices (Figure 2). The hardened gloves can cause ileus or perforation (1-3).

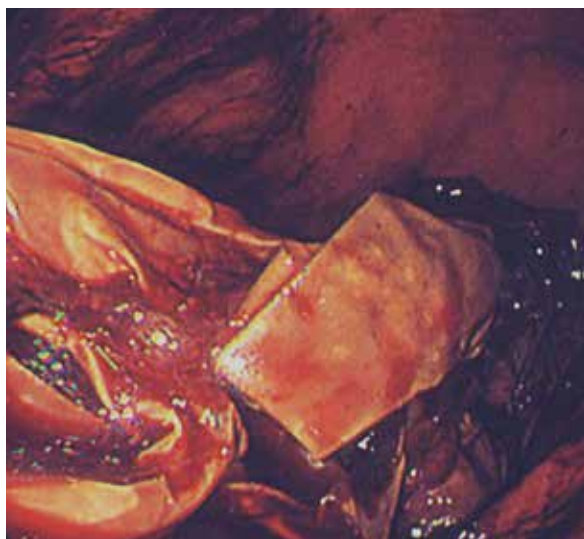


Figure 1. Foreign bodies were presented in the stomach.

Retrieval surgery was considered too risky for the patient. Hence, conservative medical management was instituted. A week later, percutaneous endoscopic gastrostomy was performed with the Funada-style loop fixture II (Create Medic, Yokohama, Japan) to avoid collapse of the stomach wall (4,5). Laceration of the lower esophagus had almost healed. Another week later, we replaced the gastrostomy tube with a trocar to easily insert laparoscopic shears. One of some gloves was held by an endoscopic snare and cut into small portions by the shears (Figure 3,4). All pieces were then retrieved, but slight laceration of the esophagus occurred. Totally, 7 gloves were retrieved, and each retrieval was performed weekly. The patient had allotriophagy in addition to dementia and had swallowed 7 gloves that had been placed for care in her room.

After laceration of the esophagus healed completely, she was transitioned from total parenteral nutrition to an oral diet. As ileus or vomiting did not occur, she was returned to the old age home. Thus, our foreign body retrieval method can be used for high-risk patients.



Figure 2. The foreign body was a disposable plastic glove that was hardened by the gastric juices.

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Figure 3. We inserted laparoscopic shears into the stomach through a trocar.

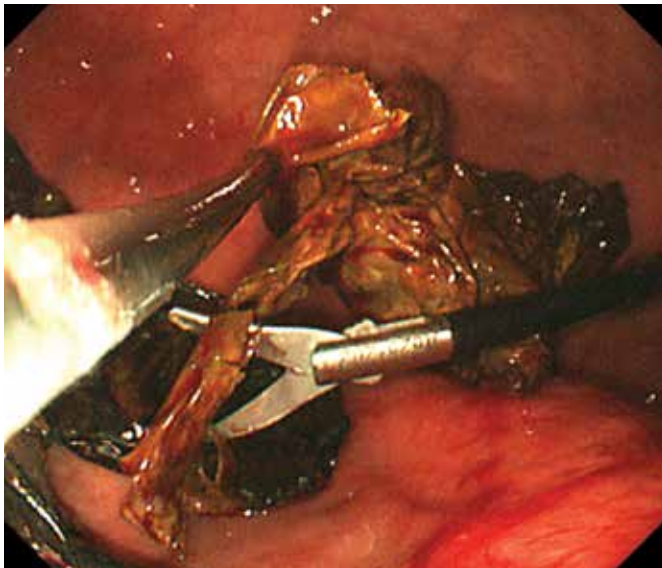


Figure 4. The glove was held by an endoscopic snare and cut into small portions by the shears.

Conflict of Interest: No conflict of interest was declared by the authors.

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REFERENCES

1. Kono T, Furuhashi T, Okita K, et al. A case of ileal peritonitis perforation due to eating a plastic glove. *Hokkaido J Surg* 2010; 55: 39-41.
2. Kobayashi A, Sekido H, Matsuda G, et al. A case of bowel obstruction caused by a medical glove due to pica. *J Jpn Surg Assoc* 2010; 71: 941-5.
3. Huang TC, Chiu HH, Liao YC. An unusual cause of small bowel obstruction: a plastic glove. *Clin Gastroenterol Hepatol* 2009; 7: 9-10.
4. Dormann AJ, Huchzermeyer H. Endoscopic techniques for enteral nutrition: standards and innovations. *Dig Dis* 2002; 20: 145-53.
5. Sakai H, Inamori M, Iida H, et al. Recovery of a misinserted gastrostomy tube during replacement: effectiveness of gastropexy using a 'funada style' kit. *Digestion* 2007; 75: 179.