Dietary Upper Gastrointestinal Stricture Caused by Mushrooms

Yuto Shiozaki¹, Takuya Otsuki¹, Kosuke Ishizuka², Yuichi Kato¹, Kenya Ie¹, and Chiaki Okuse¹

October 22, 2024

Dietary Upper Gastrointestinal Stricture Caused by Mushrooms

Yuto Shiozaki, MD^{1,2}, Takuya Otsuki, MD, PhD^{1,2}, Kosuke Ishizuka, MD, PhD, FHGM^{3,4}, Yuichi Kato, MD^{1,2}, Kenya Ie, MD, PhD, MPH^{1,2}, Chiaki Okuse, MD, PhD^{1,2}

¹Department of General Internal Medicine, St. Marianna University School of Medicine, Kawasaki, Kanagawa, Japan

²Department of General Internal Medicine, Kawasaki Municipal Tama Hospital, Kawasaki, Kanagawa, Japan

³Department of General Medicine, Yokohama City University School of Medicine, Yokohama, Kanagawa, Japan

⁴Department of General Medicine, Yokohama City University Medical Center, Yokohama, Kanagawa, Japan

Corresponding author

Yuto Shiozaki, MD

Department of General Internal Medicine, Kawasaki Municipal Tama Hospital

1-30-37, Shukugawara, Tama, Kawasaki-city, Kanagawa pref. Japan

E-Mail: yuto.shiozaki@marianna-u.ac.jp

Text word count: 287 words

Number of figures: 2 Number of references: 6

Key words: Mushroom; Upper gastrointestinal stricture

A 63-year-old Japanese man with a history of duodenal ulcer presented with frequent vomiting after eating and drinking since the previous day. He was taking rabeprazole sodium 20 mg/day. On physical examination, his temperature was 37.3°C, pulse rate was 130 beats per minute, blood pressure was 143/93 mmHg, respiratory rate was 18 breaths per minute, and SpO2 was 98% on room air. Laboratory tests revealed an elevated blood urea nitrogen 30.3 mg/dL and serum creatinine 2.23 mg/dL, suggesting possible dehydration or acute kidney injury. Abdominal computed tomography revealed gastric dilatation and luminal stricture of the digestive tract extending from the pylorus to the duodenal bulb (Figure 1). The patient was admitted and managed with fasting and intravenous fluid replacement. On the second day of hospitalisation, esophagogastroduodenoscopy (EGD) revealed a mushroom-like foreign body impacted in the pyloric region, along with deformity of the pyloric ring and narrowing of the duodenal bulb, likely caused by a previous duodenal ulcer (Figure 2). Foreign body removal was successfully performed endoscopically. The patient's symptoms,

¹Kawasaki Municipal Tama Hospital

²Yokohama City University School of Medicine Graduate School of Medicine

particularly vomiting, improved rapidly, allowing for the gradual reintroduction of food starting from the third day of hospitalisation. He was discharged on the 8th day without any recurrence of symptoms.

Upper gastrointestinal obstruction can result from the ingestion of foreign bodies, malignant tumours, or peptic ulcers. The majority of upper gastrointestinal obstructions due to ingestion in adults are diet-related, most commonly occurring in the oesophagus and often at sites of physiologic stricture, with pyloric obstruction being a rare occurrence.^{1,2} Foods that can cause dietary upper gastrointestinal obstruction include meat, fish bones, rice cakes, and gastroliths.³⁻⁵ For sharp objects, magnets, batteries, or large and long objects lodged in the stomach, EGD within 24 hours is recommended to prevent complications.⁶

References

- 1. Smith MT, Wong RK. Foreign bodies. Gastrointest Endosc Clin N Am. 2007; 17: 361-82.
- 2. Then EO, John F, Catalano C, Lopez M, Gaduputi V. An unexpected surprise: Delayed gastric outlet obstruction from coin ingestion. *Clin Pract.* 2019; 9: 1153.
- 3. Fung BM, Sweetser S, Wong Kee Song LM, Tabibian JH. Foreign object ingestion and esophageal food impaction: An update and review on endoscopic management. World J Gastrointest Endosc. 2019; 11: 174-92.
- 4. Saitsu A, Kojima N, Kunitomo K. Retained rice cake in the stomach leading to potential intestinal obstruction. *J Gen Fam Med.* 2022; 23: 356-7.
- 5. Tan F, Mo H, He X, Pei H. An unusual case of gastric outlet obstruction caused by multiple giant persimmon phytobezoars. *Gastroenterol Rep (Oxf)*. 2019; 7: 74-6.
- 6. Birk M, Bauerfeind P, Deprez PH, Häfner M, Hartmann D, Hassan C, et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2016; 48: 489-96.

7.

Figure Legends

Figure 1a: Gastric dilatation, 1b: Luminal stricture

Figure 2a: Mushroom shade fitted into the pyloric region, 2b: Removal of endoscopes

Hosted file

Figure 1_Shiozaki.tif available at https://authorea.com/users/846518/articles/1234650-dietary-upper-gastrointestinal-stricture-caused-by-mushrooms

Hosted file

Figure 2_Shiozaki.tif available at https://authorea.com/users/846518/articles/1234650-dietary-upper-gastrointestinal-stricture-caused-by-mushrooms