doi:10.1002/jgh3.12674

BRIEF REPORT

Esophageal pyogenic granuloma resected by polypectomy using a detachable snare

Hiroyoshi Iwagami, D Yusuke Hanawa and Takuji Akamatsu

Department of Gastroenterology and Hepatology, Japanese Red Cross Wakayama Medical Center, Wakayama, Japan

Key words

endoscopy: upper gastrointestinal, esophageal neoplasms, esophagus, gastroenterology.

Accepted for publication 22 October 2021.

Correspondence

Hiroyoshi Iwagami, Department of Gastroenterology and Hepatology, Japanese Red Cross Wakayama Medical Center, 4-20 Komatsubara-Dori, Wakayama 640-8558, Japan. Email: iwagamidesuta@yahoo.co.jp

Declaration of conflict of interest: None.

A 60-year-old man was referred to our hospital because of tarry stool. He had mild pharyngeal discomfort but no abdominal pain. His heart rate was 69 beats per minute, and his blood pressure was 99/55 mmHg. Laboratory tests revealed a hemoglobin level of 10.1 g/dL, blood urea nitrogen level of 36 mg/dL, and creatinine level of 0.86 mg/dL. Enhanced computed tomography revealed the presence of a high-density mass, which was suspected to be blood, in the stomach. Emergency esophagogastroduodenoscopy showed a 10-mm pedunculated polyp with a clot in the cervical esophagus (Fig. 1a,b) and excess blood in the stomach. There were no bleeding lesions in the stomach or duodenum, and the esophageal polyp was identified as the cause of bleeding. We considered pyogenic granuloma (PG) as the first differential diagnosis because the lesion was dark red in color and pedunculated, with a clot and erosion. Additionally, the lesion had no apparent findings indicative of neoplasm, such as a brownish area with abnormal intrapapillary capillary loops or irregular mucosa at the stalk, although detailed assessment was limited because of the clot and active bleeding. We performed polypectomy using a 10-mm snare (Captivator II; Boston Scientific, Tokyo, Japan) after squeezing the polyp stalk using a detachable snare (Endoloop; Olympus, Tokyo, Japan) (Fig. 1c,d). Both hemostasis and en bloc resection were achieved (Fig. 2a), and the procedure was completed in 12 min without adverse events. Additionally, the patient experienced no adverse events after the procedure. On pathological analysis, the resected specimen showed subepithelial capillary hyperplasia, a focal lobular

structure (Fig. 2b), and numerous infiltrating neutrophils (Fig. 2c), all of which were compatible with PG.

PG is a benign inflammatory vascular lesion that commonly occurs on the skin and oral mucosa and which is rarely seen in the gastrointestinal (GI) tract. Esophageal PG was first identified by Okumura *et al.*² in 1983, and was reported as protruding, <20 mm in size, pale pink to dark red in color, and sometimes covered with white exudate. PG is also reported as a possible cause of bleeding. Therefore, it is important for physicians to recognize PG and carefully observe the cervical esophagus in cases of upper GI bleeding.

Polypectomy is one of the most favorable treatment options for esophageal PG. When performing polypectomy for pedunculated polyps in the cervical esophagus, using a detachable snare is easier than endoscopic mucosal resection with normal saline injection because the operating space in the cervical esophagus is limited, and this space narrows after injecting saline. Moreover, hemostasis was efficiently obtained by squeezing the stalk of the pedunculated polyp with a detachable snare, in this case. Therefore, we believe that polypectomy using a detachable snare was the most effective treatment.

Acknowledgment

We thank Edanz (https://jp.edanz.com/ac) for editing a draft of this manuscript.

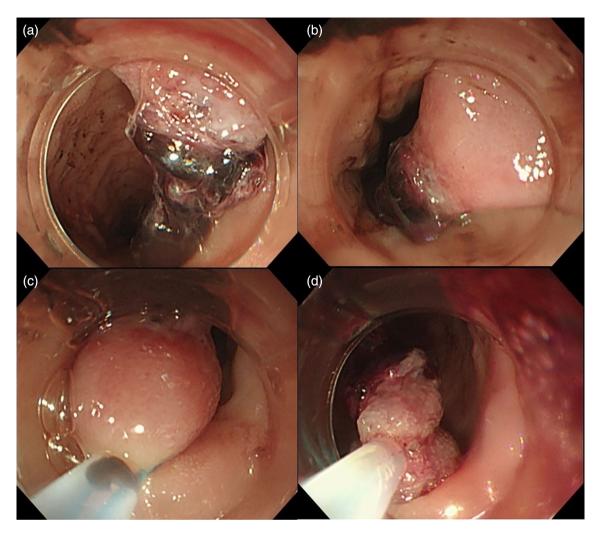


Figure 1 (a, b) Emergency esophagogastroduodenoscopy showing a 10-mm pedunculated polyp with a clot in the cervical esophagus. (c) We squeezed the polyp stalk using a detachable snare. (d) We performed polypectomy using a 10-mm snare.

References

- 1 Seoung HG, Kim GH, Song GA *et al.* Esophageal pyogenic granuloma: endosonographic findings and endoscopic treatments. *Clin. Endosc.* 2013; **46**: 81–4.
- 2 Okumura T, Tanoue S, Chiba K, Tanaka S. Lobular capillary hemangioma of the esophagus. A case report and review of the literature. *Acta Pathol. Jpn.* 1983; 33: 1303–8.
- 3 Nagahara T, Imagawa A, Taira A et al. Pyogenic granuloma of the esophagus: report of a case. Gastroenterol. Endosc. 2015; 57: 2351-7.
- 4 Zhao J, Feng Q, Shi S. Pyogenic granuloma of the esophagus. *Clin. Gastroenterol. Hepatol.* 2017; **15**: e177–e8.

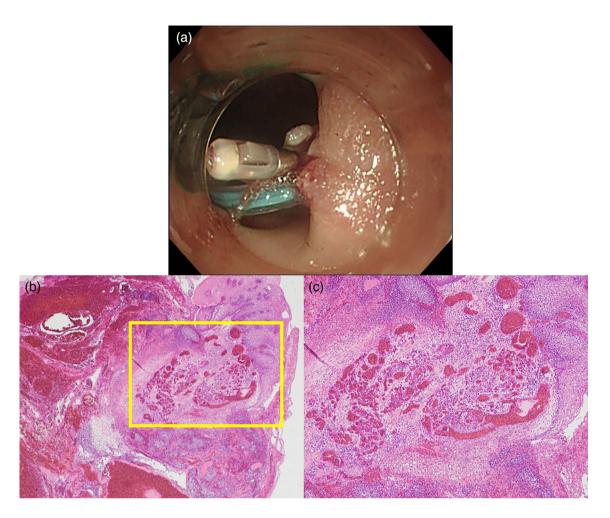


Figure 2 (a) Both hemostasis and *en bloc* resection were achieved. We added the clip because we expected an effect in preventing dislocation of the detachable snare. (b) Hematoxylin and eosin staining of the resected specimen. Subepithelial capillary hyperplasia and a focal lobular structure are seen. (c) Magnified image of the yellow square in Figure 2b. Numerous neutrophilic infiltrations are seen. All findings were compatible with pyogenic granuloma.