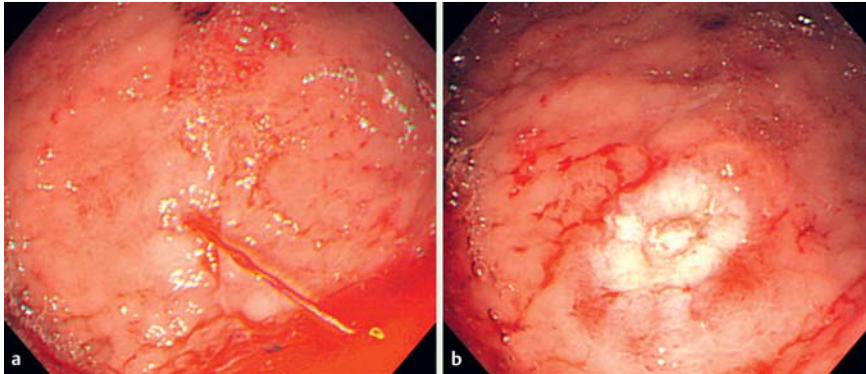
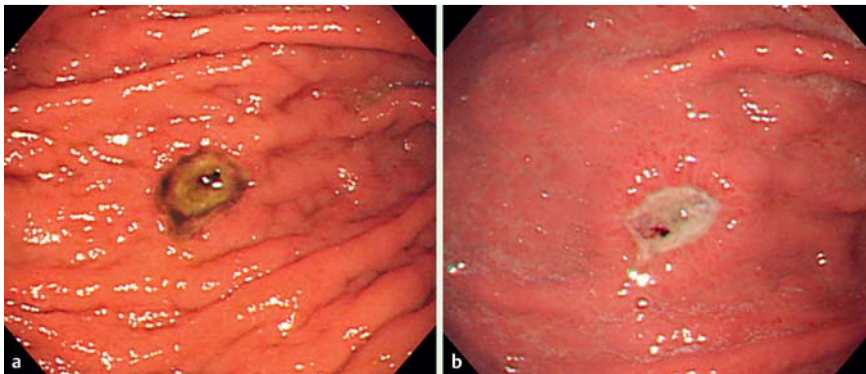


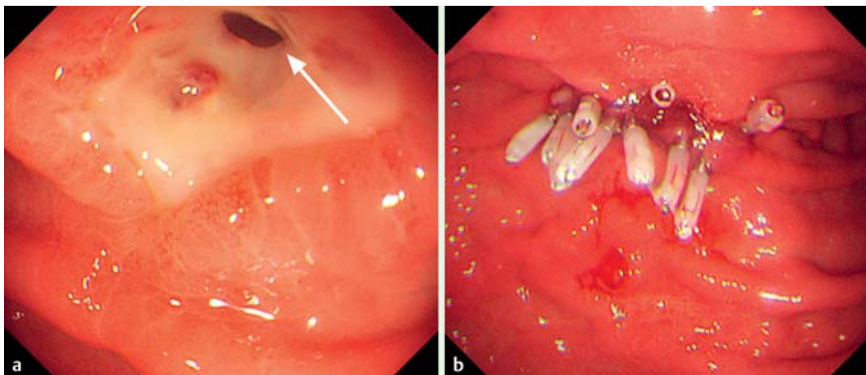
## Delayed perforation 10 days after endoscopic hemostasis using hemostatic forceps for a bleeding Dieulafoy lesion



**Fig. 1** Emergent endoscopic examination after hematemesis in an 83-year-old man who had undergone treatment for early gastric cancer. **a** Dieulafoy lesion is located at the greater curvature of the gastric remnant with arterial bleeding. **b** The bleeding point was coagulated with hemostatic forceps using the soft coagulation mode at 80W.



**Fig. 2** Follow-up endoscopic view showing absence of delayed bleeding and perforation at the hemostatic site on days 3 (**a**) and 7 (**b**) post hemostasis.



**Fig. 3** Emergent endoscopy 10 days after hemostasis. **a** A 3-mm perforation is visible in the hemostatic ulcer (arrow). **b** The perforation closed with nine endoclips.

To our knowledge, there have been no reports in the English literature of cases of delayed perforation occurring more than 2 days after hemostasis for gastrointestinal bleeding, including bleeding related to endoscopic submucosal dissection. Additionally, according to previous reports [1,2], in patients with delayed perforation, surgery was often required to improve their clinical course. We report a rare case of successful conservative treatment for delayed perforation occurring 10 days after endoscopic hemostasis using hemostatic forceps for a bleeding Dieulafoy lesion.

An 83-year-old man was admitted to our hospital for the treatment of early gastric cancer. The patient underwent pylorus-preserving gastrectomy and lymph node dissection. On postoperative day 26, he had massive hematemesis. Emergent endoscopy showed a bleeding Dieulafoy lesion at the greater curvature of the gastric remnant (● Fig. 1a). The bleeding point was grasped and coagulated with hemostatic forceps (Coagrasper, FD-410LR; Olympus, Tokyo, Japan), using the soft coagulation mode at 80W (● Fig. 1b). Follow-up endoscopic examinations showed no evidence of delayed bleeding at the hemostatic site on days 3 and 7 after the hemostasis procedure (● Fig. 2). However, on day 10 after hemostasis, the patient complained of severe upper abdominal pain. Free air and ascites were seen in the peritoneal cavity on emergent computed tomography and endoscopic examination revealed a perforation of 3 mm in diameter in the hemostatic ulcer (● Fig. 3a). The perforation was closed endoscopically with nine endoclips (HX-600-090L; Olympus) (● Fig. 3b). The general condition of the patient as well as the laboratory data and radiographic findings gradually improved, and 40 days after the perforation he was discharged.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AC

**Competing interests:** None

**S. Ninomiya<sup>1</sup>, H. Shiroshita<sup>1</sup>,  
T. Bandoh<sup>1</sup>, W. Soma<sup>2</sup>, H. Abe<sup>2</sup>,  
T. Arita<sup>1</sup>**

<sup>1</sup> Department of Surgery, Arita Gastrointestinal Hospital, Oita, Japan

<sup>2</sup> Department of Internal Medicine, Arita Gastrointestinal Hospital, Oita, Japan

**References**

- 1 Hanaoka N, Uedo N, Ishihara R et al. Clinical features and outcomes of delayed perforation after endoscopic submucosal dissection for early gastric cancer. *Endoscopy* 2010; 42: 1112–1115
- 2 Ikezawa K, Michida T, Iwahashi K et al. Delayed perforation occurring after endoscopic submucosal dissection for early gastric cancer. *Gastric Cancer* 2012; 15: 111–114

**Bibliography**

**DOI** <http://dx.doi.org/10.1055/s-0032-1326275>  
*Endoscopy* 2013; 45: E99–E100  
© Georg Thieme Verlag KG  
Stuttgart · New York  
ISSN 0013-726X

**Corresponding author**

**S. Ninomiya**

Department of Surgery  
Arita Gastrointestinal Hospital  
Maki 1-2-6  
Oita 870-0924  
Japan  
Fax: +81-97-5561778  
[sninomiya@med.oita-u.ac.jp](mailto:sninomiya@med.oita-u.ac.jp)