CASE REPORT

Treatment of a colonic Dieulafoy lesion with endoscopic hemocclipping

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SUMMARY

A 39-year-old man presented to our hospital with massive haematochezia and dizziness. A colonoscopy indicated the presence of an abnormal visible vessel with an adherent clot at the ascending colon. No mucosal abnormality surrounding the lesion was noted. The lesion was diagnosed as a Dieulafoy lesion, and was managed by application of two haemostatic clips. During the 6-month follow-up period, no recurrence of haematochezia was noted, and his haemoglobin level returned to the normal level after 6 months.

BACKGROUND

Dieulafoy lesion is a well-recognised cause of gastrointestinal bleeding. It has been widely described in the stomach, but in the colon is very rare. Herein a colonic Dieulafoy lesion with successful endoscopic hemocclipping was reported.

CASE PRESENTATION

A 39-year-old man presented to our hospital with massive haematochezia and dizziness. He had experienced ureter stones when he was 30 years of age; otherwise, his medical history was unremarkable. On the day before admission, he developed massive sudden painless haematochezia and experienced dizziness. At admission, his haemoglobin (Hb) level was found to be 8.3 g/dl. CT of the abdomen indicated the presence of a small round lesion in the ascending colon, which was stained by contrast material (figure 1). No extravasation was apparent. During a colonoscopic examination, the presence of fresh blood and clotting was observed throughout the colon; however, no blood was detected at the terminal ileum or caecum (figure 2). The quality of the observation was poor due to an imperfect colonic preparation. Following the examination, continuous haemorrhaging was noted, and his Hb level decreased to 6.7 g/dl.

TREATMENT

Colonic lavage using oral polyethylene glycol solution was performed on the following day, and a colonoscopy indicated the presence of an abnormal visible vessel with an adherent clot at the ascending colon (figure 3). No mucosal abnormality surrounding the lesion was noted. The lesion was diagnosed as a Dieulafoy lesion, and was managed by application of two haemostatic clips (figure 4).

OUTCOME AND FOLLOW-UP

The patient was discharged after 4 days. During the 6-month follow-up period, no recurrence of

Figure 1 CT of the abdomen indicated the presence of a small round lesion in the ascending colon, which was stained by contrast material (arrow).

haematochezia was noted, and his Hb level returned to the normal level (16.1 g/dl) after 6 months.

DISCUSSION

The Dieulafoy lesion is a tortuous, large-calibre arteriole protruding through a small mucosal

Figure 2 During a colonoscopic examination, the presence of fresh blood and clotting was observed throughout the colon.

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Figure 3 A colonoscopy indicated the presence of an abnormal visible vessel with an adherent clot at the ascending colon.

defect, which can result in massive and recurrent bleeding.¹ Dieulafoy lesions account for 1–2% of cases of acute gastrointestinal bleeding. Approximately 71% of the Dieulafoy lesions are detected in the stomach. In contrast, only 2% are detected in the colon.²

Figure 4 The lesion was managed by application of two haemostatic clips.

If an active haemorrhage of at least 0.5 ml/min is present, up to 71% of all initial endoscopies can yield an appropriate diagnosis. However, in 6% of patients, diagnosis using initial endoscopies may be very difficult due to the minute size of the lesion and the intermittent nature of the bleeding.³

The endoscopic criteria that define Dieulafoy lesions include: (1) active arterial spurting or oozing from a small mucosal defect; (2) visualisation of a protruding vessel within a small mucosal defect and (3) a fresh blood clot adherent to a defect of normal mucosa.⁴ In the present case, the second criterion was noted.

Endoscopic therapeutic methods for the treatment of this condition involve injection of epinephrine or Aethoxysklerol, as well as thermal (argon plasma coagulation) and mechanical (haemostatic clipping) techniques.⁵ In the present case, we used hemoclipping as it results in less damage to the surrounding tissues, particularly as the wall of the large intestine is thin, thus avoiding the possibility of necrosis or perforation caused by injection or thermal coagulation.

Learning points

- ▶ The Dieulafoy lesion should be included in the differential diagnosis of haematochezia.
- ▶ Repeated endoscopy may be necessary to establish diagnosis.
- ▶ Therapeutic endoscopy using haemostatic clipping is safe and effective for treatment of a colonic Dieulafoy lesion.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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