Findings that shed new light on the possible pathogenesis of a disease or an adverse effect

Duodenal dissection secondary to intramural haematoma after endoscopic therapy for a bleeding duodenal ulcer in a patient on long-term haemodialysis with liver cirrhosis

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Summary

We report a case of intestinal obstruction and duodenal dissection resulting from an intramural haematoma after therapeutic upper digestive endoscopy with injection therapy for a bleeding duodenal ulcer in a patient on long-term haemodialysis with liver cirrhosis.

BACKGROUND

Intramural duodenal haematoma (IDH) is a rare clinical condition. Most IDH develops after blunt abdominal trauma, and less commonly, reported as a complication of anticoagulant therapy, blood dyscrasia, pancreatic disease and collagen vascular disease. IDH has been reported as a complication of diagnostic or therapeutic endoscopy in patient with liver cirrhosis¹ and end-stage renal disease.²

CASE PRESENTATION

The patient was a 58-year-old man with diabetes mellitus and was on long-term haemodialysis with hepatitis B virus-related liver cirrhosis (LC) and hepatoma status post percutaneous ethanol injection. The severity of LC was classified as Child-Pugh grade A. The patient was also a case of end-stage renal disease (ESRD) and received regular haemodialysis (every weekday 1, 3, 5) and the dose of anticoagulation and protocol were regular during renal replacement therapy before this admission. He admitted

to our hospital for moderate epigastralgia and coffee-ground vomitus. Endoscopic examination showed that there were no esophageal varices, gastric antral vascular ectasia, duodenal varices and portal hypertensive gastropathy. Endoscopy revealed several ulcers with irregular shape and one suspected visible vessel in the duodenal bulb, and haemoclips plus injection of 15 ml of 0.2% epinephrine was performed for haemostasis. The epinephrine injections were given locally in relation to the ulcer. His coagulation profile was platelet count: 93 000/ μ l; prothrombin time (PT): 12.0 s (normal range: 9.5–12.5 s in the hospital); activated partial thromboplastin (aPTT) time: 27.1 s (24–35 s); international normalised ratio (INR): 1.2. 12 hours later, he again developed epigastralgia and hypotension. Emergency CT revealed a big intramural

Figure 1 CT revealed a big intramural haematoma in the second, third portion duodenum with infiltrative haematoma in bilateral anterior pararenal space.

Figure 2 Endoscopic image of this duodenal haematoma.

Figure 3 Upper gastrointestinal series revealed dissection of the second-part duodenum with a narrow false lumen and blocked true lumen.

haematoma in second, third portion duodenum with infiltrative haematoma in bilateral anterior pararenal space (figure 1). Endoscopic image of this duodenal haematoma was shown in figure 2. Upper gastrointestinal series revealed dissection of the second-part duodenum with a narrow false lumen and blocked true lumen (figure 3). He received parenteral feeding for 21 days and within 6 weeks the haematoma was gradually absorbed using conservative management.

Duodenal dissection secondary to IDH may be diagnosed as a complication of the endoscopic procedure in a patient with a bleeding tendency, such as ESRD on haemodialysis and LC, even the coagulation screening test (PT/aPTT/INR) is within normal range.^{1 2} Gastroenterology

endoscopists should keep this complication in mind. CT seems to be the useful tool for diagnostic and follow-up purposes. Surgery may be not necessary in this kind of patients with duodenal dissection and IDH.³ The treatment of choice for cases of duodenal dissection secondary to IDH may be conservative care.

Learning points

- ▶ Duodenal dissection secondary to intramural duodenal haematoma may be diagnosed as a complication of the endoscopic procedure in patients with bleeding tendency, even the coagulation screening test is normal.
- ▶ Gastroenterology endoscopists should keep this complication in mind.
- ▶ Computed tomography seems to be the useful tool for diagnostic and follow-up purposes.
- ▶ Surgery may be not necessary.

Competing interests None.

Patient consent Obtained.

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