

Acute aortic dissection causing gastroduodenal and hepatic infarction



Fig. 1 Chest radiograph showed a widening of the mediastinum.

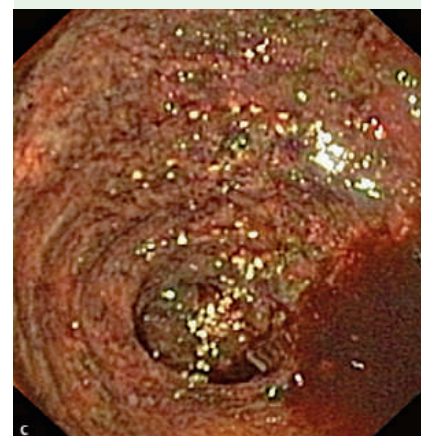
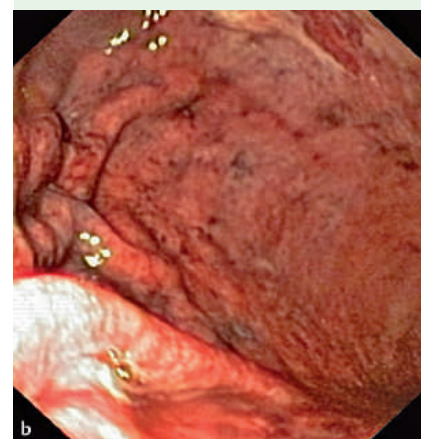
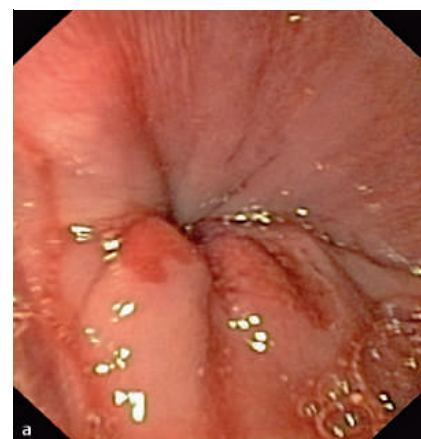


Fig. 2 **a** Esophagogastroduodenoscopy (EGD) revealed a normal esophagus. **b** EGD demonstrated gastric ischemia with congested mucosa. **c** Dark duodenal mucosa with submucosal hemorrhage secondary to infarction.

A 61-year-old man presented with severe acute epigastric pain for 15 hours followed by hematemesis. On arrival, the patient had high blood pressure, tachypnea, and tachycardia. Bowel sound was absent with mild abdominal distention. Nasogastric lavage revealed fresh blood. Complete blood count and liver function tests were unremarkable. Serum amylase and lipase were 836 U/L (normal range, 28–100 U/L), and 1870 U/L (normal range, 13–60 U/L), respectively. Chest radiography demonstrated a wide mediastinum (● **Fig. 1**), and a plain film of the abdomen showed small-bowel ileus. He was sent for an emergent esophagogastroduodenoscopy. The findings are shown in ● **Fig. 2** and ● **Video 1**. Gastroduodenal infarction was suspected and he was transferred for an emergent computed tomography (CT) scan of the whole abdomen. Acute aortic dissection (Stan-

ford type B) with hepatic and intestinal infarction was diagnosed (● **Fig. 3**). After the patient had been stabilized, an exploratory laparotomy was performed. Gangrene of the gallbladder, spleen, descending and sigmoid colon were detected. Cholecystectomy, splenectomy, and left-half colectomy were performed. Within the same day, fenestration of infrarenal abdominal aorta to provide blood flow to the gut was also successfully carried out. After surgery the patient improved and experienced no further abdominal pain or bleeding.

We report a patient with acute aortic dissection presenting with acute upper gastrointestinal bleeding from gastroduodenal ischemia. In general, patients with uncomplicated dissecting aortic aneurysm type B are best treated with conservative therapy [1]. However, our patient had a complicated course that compromised all major intra-abdominal aortic branches. Then an emergent aortic fenestration was indicated to effectively protect organs from gangrene. However, this

procedure still carries a high mortality rate [2]. By contrast, endovascular stent grafting is a less-invasive alternative and has a lower morbidity rate, especially in subacute and chronic dissection [3]. Unfortunately the outcome is not as good as surgery in acute dissection [4,5].

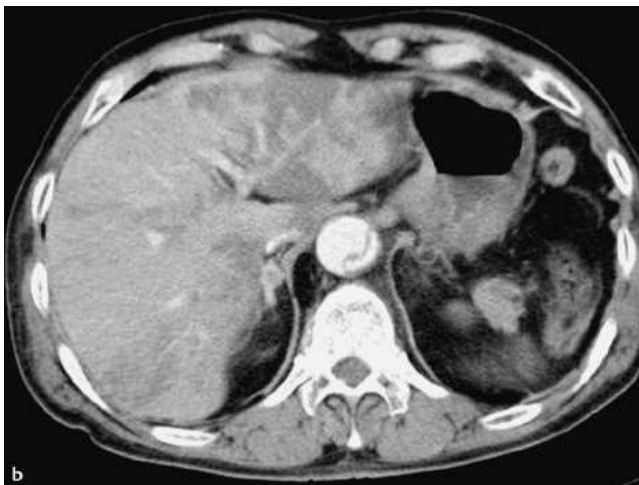
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Video 1

EGD revealed a normal esophagus whereas gastric mucosa showed ischemic congestion.



Fig. 3 **a** Computed tomography of the abdomen demonstrated a false track septum in the abdominal aorta. **b** Intravenous contrast computed tomography of the liver showed the area of left lobe infarction.



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References

- 1 Estrera AL, Miller CC 3rd, Safi HJ et al. Outcomes of medical management of acute type B aortic dissection. *Circulation* 2006; 114 (1 Suppl): I384–I389
- 2 Panneton JM, Teh SH, Cherry KJ jr. et al. Aortic fenestration for acute or chronic aortic dissection: an uncommon but effective procedure. *J Vasc Surg* 2000; 32: 711–721
- 3 Nienaber CA, Fattori R, Lund G et al. Nonsurgical reconstruction of thoracic aortic dissection by stent-graft placement. *New Engl J Med* 1999; 340: 1539–1545
- 4 Dake MD, Kato N, Mitchell RS et al. Endovascular stent-graft placement for the treatment of acute aortic dissection. *New Engl J Med* 1999; 340: 1546–1552
- 5 Eggebrecht H, Nienaber CA, Neuhauser M et al. Endovascular stent-graft placement in aortic dissection: a meta-analysis. *Eur Heart J* 2006; 27: 489–498

Bibliography

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