

IMAGES IN EMERGENCY MEDICINE

Gastroenterology

65-year-old woman with hematemesisChieh-Ching Yen MD^{1,2} | Chih-Kai Wang MD^{1,3}¹ Department of Emergency Medicine, Chang Gung Memorial Hospital, Linkou Branch, Taoyuan, Taiwan² College of Medicine, National Yang-Ming University, Taipei, Taiwan³ College of Medicine, Chang Gung University, Taoyuan, Taiwan**Correspondence**

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Chieh-Ching Yen, Chih-Kai Wang both equally contributed to this study.

Informed consent: Informed consent was obtained from the patient.

1 | PATIENT PRESENTATION

A 65-year-old female patient with a history of sigmoid cancer involving the para-aortic lymph nodes, treated by laparoscopic low anterior resection and para-aortic lymph node excision, presented to the emergency department with hematemesis a few hours ago. On physical examination, she was alert and afebrile, with a pulse rate of 125 beats/min and blood pressure of 115/63 mmHg. Epigastric tenderness was found. Laboratory tests revealed hemoglobin level of 7.4 g/dL. Upper gastrointestinal endoscopy showed unknown bleeding focus (Figure 1). A computed tomography angiography (CTA) of the abdomen demonstrated a fistula connecting the jejunal lumen and left common iliac artery, with contrast extravasation in the jejunum (Figure 2).

2 | DIAGNOSIS**2.1 | Arterio-jejunal fistula**

The fistula was attributed to recurrence of para-aortic lymph nodes. The patient underwent treatment with covered endovascular reconstruction of aortic bifurcation technique by a vascular surgeon. Aortoenteric fistula (AEF) is a rare and fatal disease with communication between the aortoiliac tree and adjacent bowel.¹ It can be divided into primary and secondary causes. The most common predisposing disease for primary AEF is abdominal aortic aneurysm.² Less common

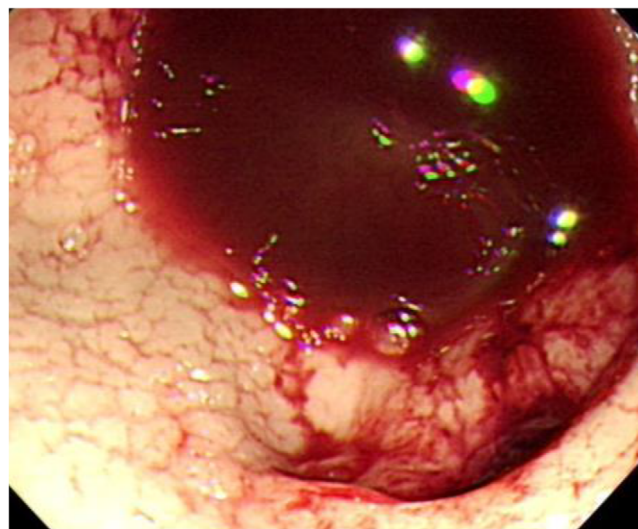


FIGURE 1 Upper gastrointestinal endoscopy revealed copious bloody fluid and blood clot retained in the lumen of stomach and duodenum

causes include aortitis, diverticulitis, appendicitis, foreign bodies, and gastrointestinal malignancies.³⁻⁵ Secondary AEF is more common and usually associated with aortic stent-graft placement.¹ Patients with AEF usually present with gastrointestinal bleeding.⁶ CTA is the preferred image modality, although 50% of those are diagnosed operatively. The most specific sign on CTA is the direct contrast extravasation

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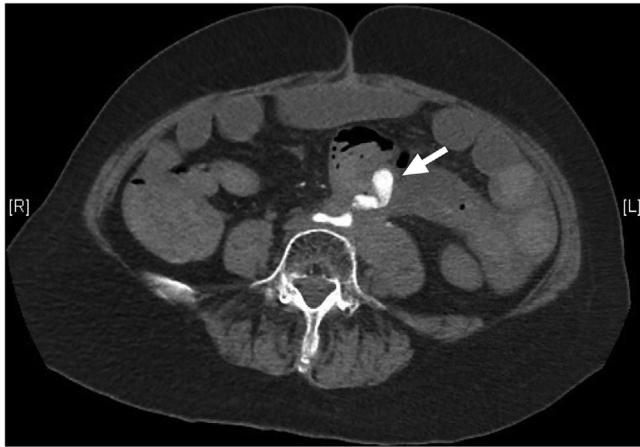


FIGURE 2 Computed tomography angiography showed a fistula connecting jejunal lumen and left common iliac artery, with contrast extravasation in the jejunum

from the aorta to the bowel loop.⁷ Endovascular surgery is the main treatment with better survival than open surgery.⁸

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