Endoscopic treatment of an infected retroperitoneal hematoma following endoscopic ultrasound-guided pseudocyst drainage

A 32-year-old man with alcoholic pancreatitis presented with the complaint of abdominal pain and vomiting that necessitated parenteral feeding. Abdominal computed tomography (CT) scan showed a 10-cm pseudocyst in the pancreatic body ([Fig. 1]) [1]. In view of persisting symptoms and the pseudocyst size, he was referred for endoscopic ultrasound (EUS)-guided cystogastrostomy. Echoendoscopy confirmed the presence of a large pancreatic cyst adherent to the stomach wall. Cystogastrostomy was complicated by spurting of blood from the gastric wall into the pseudocyst cavity. A metal stent was placed across the gastrocystic fistula with initial hemostasis. However, a few minutes later the patient developed hematemesis with a significant drop in hemoglobin. An arteriogram showed active bleeding from a left gastric artery branch ([Fig. 2]) and transcatheter embolization of this branch was carried out using metal coils. Repeat arteriogram 10 minutes later confirmed successful hemostasis.

Prophylactic antibiotics were started. However 5 days later the patient developed high grade fever, and abdominal CT showed a large retroperitoneal hematoma ([Fig. 3]). We decided to remove the infected clots by using the same technique as for endoscopic necrosectomy. After removal of the metal stent, a gastroscope was passed through the fistula into the retroperitoneal cavity. Blood clots were removed using a Roth Net ([Fig. 4]) and the cavity was washed with saline. A nasogastric tube was inserted into the cavity and 4-hourly saline lavage was applied through the tube. Another session of endoscopic clot removal was carried out 3 days later, and two double-pigtail catheters (10 Fr, 10 cm) were inserted into the cavity. CT carried out after the second endoscopy confirmed resolution of the hematoma ([Fig. 5]), with the patient becoming afebrile soon after that.

EUS-guided drainage is the preferred approach for management of pancreatic pseudocyst because of its lower morbidity rate compared with surgical and percutaneous approaches [2]. However, this procedure may be complicated by bleeding [3], and retroperitoneal hematomas arising after bleeding into cyst cavities may become infected. This is the first reported case of management of an infected retroperitoneal hematoma by endoscopic “clot-ectomy.”

**Fig. 1** Computed tomography (CT) scan showing a 10-cm pancreatic pseudocyst compressing the stomach.

**Fig. 2** a Metal stent across a gastrocystic fistula, with active bleeding. b Arteriogram showing active bleeding from a left gastric artery branch.

**Fig. 3** Abdominal CT shows a large retroperitoneal hematoma.
Competing interests: None

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References

Bibliography
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Fig. 4 a Infected retroperitoneal blood clots. b Endoscopic removal of blood clots using a Roth Net.

Fig. 5 a Double-pigtail catheters in the retroperitoneum shown on x-ray. b Resolution of the retroperitoneal hematoma is confirmed at CT.