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Endoscopic detection of a potentially dangerous large vessel coursing through a walled-off pancreatic necrosis

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A 32-year-old male was diagnosed with alcohol-related acute necrotizing pancreatitis 10 months ago. He now presented to us with upper abdominal pain and vomiting with a palpable upper abdominal lump. Contrast-enhanced computed tomography scan (CECT) showed a large walled-off necrosis (WON) of size 20 cm in pancreatic head and body region with splenic vein thrombosis and venous collaterals (Fig. 1A). Under endoscopic ultrasound guidance the WON was punctured using a 19 G needle (Fig. 1B) and the cystogastrostomy tract was dilated up to 12 mm. Thereafter, two 10 Fr double pigtail stents along with a nasocystic catheter for irrigation were placed in the cavity. He was also given intravenous antibiotics. There was improvement in pain, the lump decreased in size but the patient developed fever. A week later the nasocystic catheter was removed and stents were exchanged with three 10 Fr stents. However, his fever persisted, and repeat CECT revealed persistent collection with air pockets. After interdisciplinary consultation, endoscopic necrosectomy was done with CO_2 insufflation. The tract was dilated up to 15 mm and on insertion of a gastroscope, a large vessel was seen coursing through the necrotic cavity (Fig. 2). Endoscopic necrosectomy was done carefully avoiding this vessel and the cavity was emptied. After completion of the procedure, two 10 Fr double pigtail transmural stents were placed in the cavity. Following this, he became afebrile and was discharged.

Bleeding is a known complication of endoscopic transmural drainage of WON and this is usually due to puncture of an intervening blood vessel, artery or vein [1]. The risk of bleeding is further increased during direct endoscopic necrosectomy as the vessels coursing through the cavity may be injured during blind removal of necrotic material; therefore, the debridement should be done carefully avoiding coursing vessels [1,2].

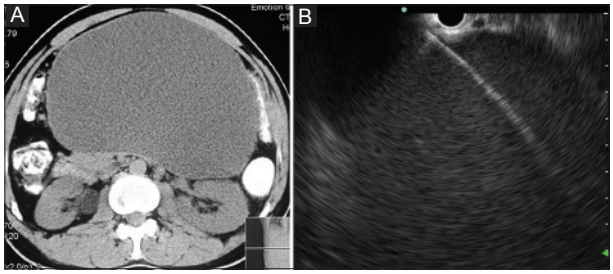

Figure 1 (A) Contrast-enhanced computed tomography of the abdomen: large walled-off necrosis (B) Endoscopic ultrasound-guided puncture of walled-off necrosis (WON). The guide wire can be seen inside the WON

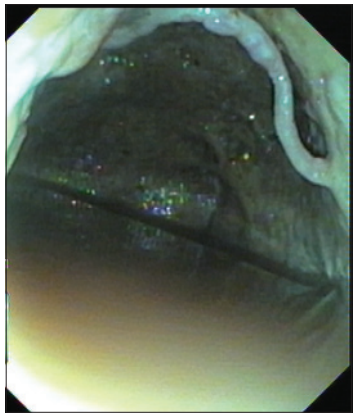

Figure 2 Direct endoscopic necrosectomy: Cavity filled with necrotic purulent material. A blood vessel can be seen coursing through the cavity

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