Delayed pancreatic ductal leakage after EUS-FNA for autoimmune pancreatitis

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A 68-year-old woman was admitted because of severe abdominal distention with tenderness. Two months ago, a diffuse enlarged pancreas with rim-like enhancement [Figure 1a, white arrows] and irregular narrowing of the main pancreatic duct [Figure 1b, white arrows] were detected by computed tomography (CT) and magnetic resonance cholangiopancreatography, respectively. EUS-FNA of the pancreatic tail was performed with a transgastric approach using a 19-gauge needle [Figure 1c, white arrowheads]. She was diagnosed as having autoimmune pancreatitis (AIP). Oral prednisolone therapy (30 mg daily) was started followed by tapering every 2 or 4 weeks. Two months after EUS-FNA, she was admitted again with the aforementioned symptoms. The upper abdomen was severely distended [Figure 1d, white arrows]. The CT scan revealed extremely large fluid collection from around the spleen to the anterior left lobe of the liver [Figure 1e and f]. Endoscopic retrograde pancreatography showed suspicious contrast leakage from the tail of the pancreatic duct [Figure 2a, white arrows]. Then, endoscopic nasopancreatic drainage was performed. One week later, we performed ultrasound-guided percutaneous drainage with a retroperitoneal approach [Figure 2b, white arrowheads] because the fluid spread retroperitoneally to the anterior left lobe of the liver. The fluid was chocolate colored with extremely high amylase level [Figure 2c]. The fluid almost disappeared [Figure 2d and e] within 1 week. Four months after percutaneous drainage, the follow-up CT scan revealed no recurrence with steroid maintenance therapy (5 mg daily).

EUS-FNA is generally considered a safe procedure.[1,2] We experienced delayed pancreatic ductal leakage after EUS-FNA for AIP. Some patients with pseudocysts associated with AIP who respond to steroids have been reported.[3] Heo *et al.* reported a case of pancreatic ascites, pancreatic ductal leakage, and multiple pseudocysts with AIP; the ascites with pseudocyst improved with corticosteroid therapy and endoscopic transpapillary stenting of the main pancreatic duct.[4] Although our patient was taking adequate prednisolone orally, fluid collection gradually increased within 2 months after EUS-FNA. Delayed pancreatic ductal leakage may be affected by delayed wound healing with steroid therapy, resolution of swelling, and weakness

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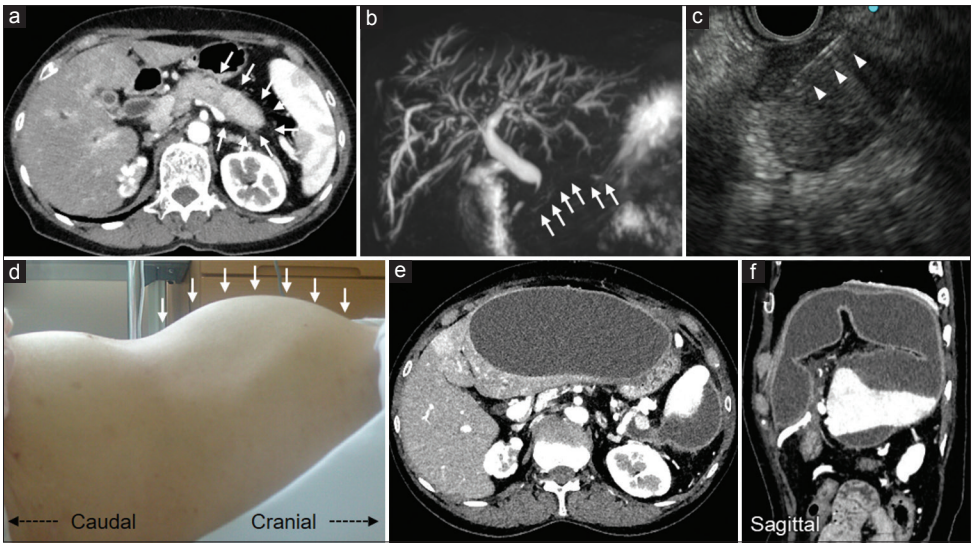

Figure 1. Computed tomography scan showing diffuse enlargement of the pancreas with rim-like enhancement (a, white arrows). Magnetic resonance cholangiopancreatography shows irregular narrowing of the main pancreatic duct (b, white arrows). Transgastric EUS-guided FNA is performed (c, white arrowheads). The upper abdomen is severely distended (d, white arrows). Computed tomography scan showing extremely large fluid collection (e and f)

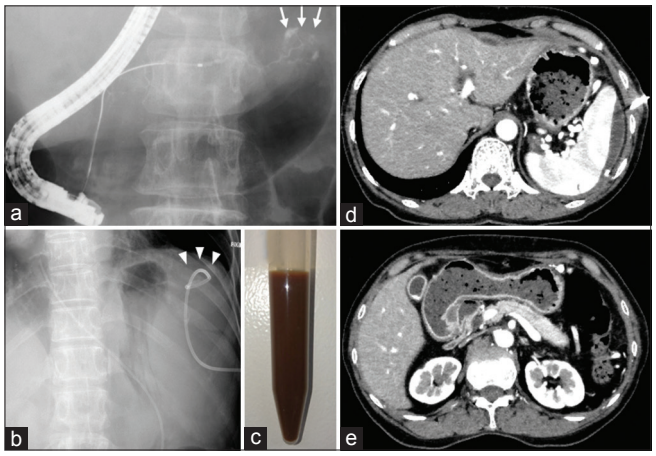

Figure 2. Endoscopic retrograde pancreatography revealing suspicious contrast leakage from the tail of the pancreatic duct (a, white arrows). Percutaneous drainage is performed with a retroperitoneal approach (b, white arrowheads). The fluid is chocolate colored (c). Computed tomography scan showing almost the disappearance of the fluid (d and e)

of the pancreatic duct with active inflammation due to AIP. Physicians should consider delayed pancreatic ductal leakage after EUS-FNA in patients with AIP receiving steroid therapy.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understand that her name and initial will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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