

## Letter to the Editor

## Treatment of a Huge Pancreatic Pseudocyst Associated with Autoimmune Pancreatitis

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Dear Sir,

Pancreatic pseudocysts are lesions associated typically with acute and chronic pancreatitis. Since spontaneous resolution of massive pseudocysts is very unlikely, drainage by endoscopic or surgical means is a recommended first line of treatment. However, this may not be the case for cysts associated with autoimmune pancreatitis (AIP).

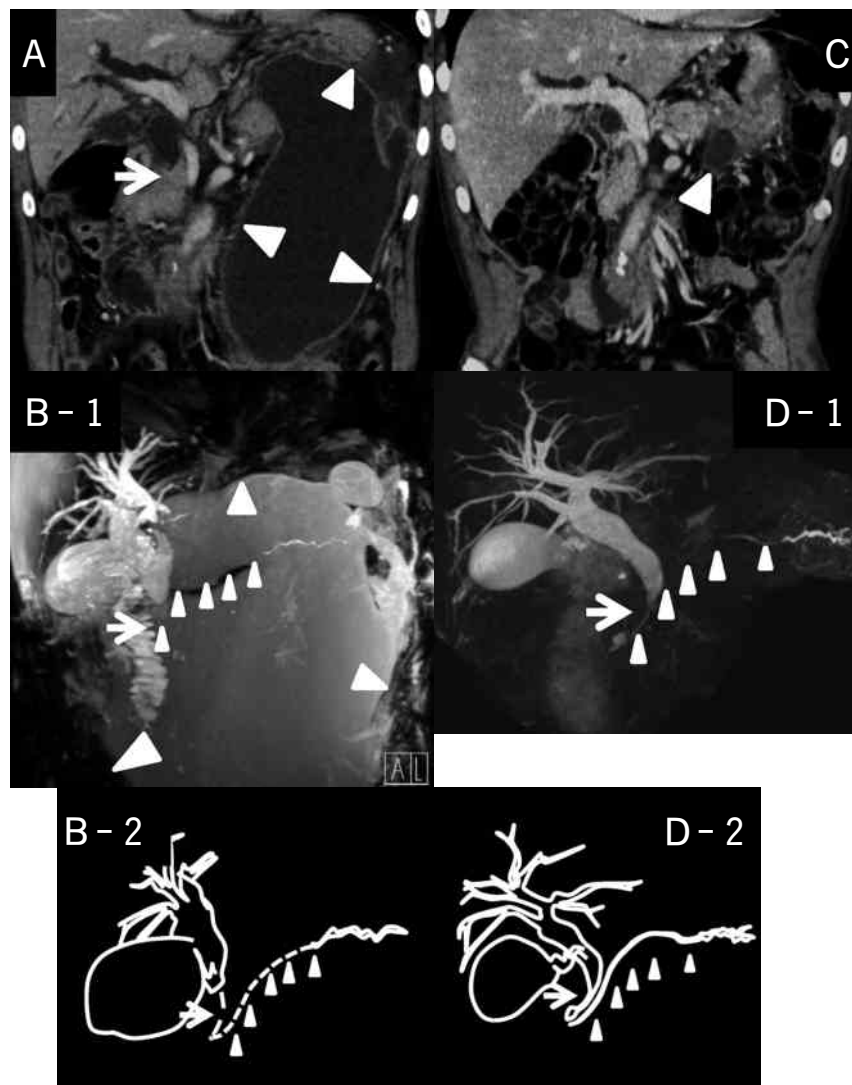
A 70-year-old man had noticed a slowly growing epigastric mass 9 months prior to hospital admission for epigastric pain and difficulty eating. Slight jaundice and a large epigastric mass with mild tenderness were detected by physical examination. Laboratory data showed abnormalities in blood cell counts and biochemical tests, including white blood cells 12,850/ $\mu$ l, total bilirubin 2.6 mg/dl, alanine aminotransferase 40 U/l, aspartate aminotransferase 49 U/l, alkaline phosphatase 1,006 U/l (normal : 115-330 U/l),  $\gamma$ -GTP 90 U/l (normal : 13-70 U/l), pancreatic amylase 243 U/l (normal : 22-55), and lipase 138 U/l (normal : 11-53 U/l). Imaging examinations (**Fig. A, B**) revealed a huge cystic lesion of over 100 mm in diameter with uniform fluid content in the left upper abdomen. Diffuse narrowing of the pancreatic duct in the head and body of the pancreas which separated from the cystic lesion, and narrowing of the intrapancreatic bile duct with corresponding dilatation of upstream bile ducts due to segmental enlargement of the pancreatic head were observed. We also noted soft tissue which surrounded the abdominal aorta. Based on these radiological abnormalities and high serum IgG4 352 mg/dl (normal : 4-108), the patient was diagnosed as having pancreatic pseudocyst due to AIP. Sclerosing dacryoadenitis, sialoadenitis and chest abnormalities including hilar lymphadenopathy were not observed.

It has been reported that narrowing of the pancreatic duct and subsequent retention of pancreatic juice associated with AIP improves rapidly with prednisolone (PSL) therapy.<sup>1)2)</sup> Accordingly, the patient commenced PSL treatment at 0.5 mg/kg daily, and the large cyst found on admission was dramatically decreased in size after only 1 week of therapy (**Fig. C, D**). The narrowing and associated dilatations of bile ducts were also improved.

We previously described the clinical outcomes of 3 patients with pancreatic pseudocyst associated with AIP<sup>1)</sup>. Although the cysts responded well to PSL, their sizes (largest : 60  $\times$  36 mm) were much smaller than that in the present case. Kubota et al<sup>2)</sup> observed that while small cysts tended to respond favorably to PSL treatment, large cysts of over 55 mm in diameter did not. However, the present pseudocyst which was larger than 100 mm in diameter exhibited a rapid and drastic improvement with steroid therapy, suggesting that PSL

can be considered a first-line drug for all sizes of AIP-associated pancreatic pseudocysts. These findings may spare patients and medical staff from possibly unnecessary pseudocyst drainage.

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Imaging examinations. Fig. A (CT), B-1 (MR) and B-2 (schema of MRI) are images taken upon patient admission. Fig. C (CT), D-1 (MR) and D-2 (schema of MRI) were obtained at 1 week after commencement of prednisolone therapy. The arrow indicates the narrowing of the intrapancreatic bile duct. Small arrowheads denote the pancreatic duct. Large arrowheads demarcate the inner margins of the cystic lesion.

### References

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