

A Rare Case of Acute Pancreatitis with Concomitant Ulcerative Colitis

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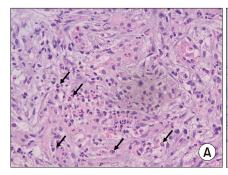
A 40-year-old man was admitted to our hospital presenting with epigastric pain and small-volume bloody stools. He denied any history of alcohol abuse. Laboratory studies demonstrated leukocytosis, elevated C-reactive proteins and increased serum amylase/lipase levels. Abdominal computed tomography (CT) revealed a diffuse enlargement of the pancreas with a low attenuating halo accompanied by diffuse bowel-wall thickening involving the rectum (Fig. 1). Magnetic resonance imaging showed diffuse

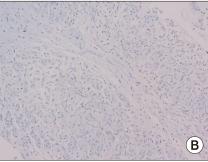
pancreatic enlargement with loss of pancreatic clefts. Endoscopic ultrasound (EUS) demonstrated hypoechoic diffuse pancreatic enlargement with patchy and coarse heterogeneous parenchyma. A EUS-guided fine-needle biopsy (EUS-FNB) with a 22-gauge needle (Echotip ProCore® HD Ultrasound biopsy needle; Wilson-Cook Medical Inc., Bloomington, IN, USA) was performed. Subsequent flexible sigmoidoscopy revealed mucosal erythema and edema of the rectum. On the histology from EUS-FNB, acinar atro-





FIG. 1. Abdominal computed tomography reveals (A) diffuse edematous swelling of the pancreas, "sausage like" appearance of the pancreas with a low attenuating halo (white arrows) and (B) diffuse bowel wall thickening involving the rectum (open white arrow).





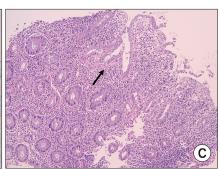


FIG. 2. (A) The epithelium of the duct walls shows infiltration by granulocytes (arrows-granulocytic epithelial lesions) (H&E stain, $\times 400$). (B) Immunostaining for IgG4 reveals no positive staining plasma cell ($\times 200$). (C) Histologic findings show crypt architectural distortion including crypt branching (arrow) with ulceration and inflammatory expansion of the lamina propria with neutrophils (H&E stain, $\times 100$).

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Received February 19, 2022 Revised April 5, 2022 Accepted April 17, 2022 phy with infiltration of granulocytes and interstitial fibrosis without IgG4-positive cells was observed (Fig. 2A, B). In addition, a rectal biopsy showed active chronic colitis and cryptitis compatible with ulcerative colitis (UC) (Fig. 2C). On serum immune marker evaluation, the patient was IgG4 negative with antinuclear antibody negative, but cytoplasmic antineutrophil cytoplasmic antibodies (C-ANCA) were positive. There were no clinical manifestations of C-ANCA-associated small vessel vasculitis such as Wegener's granulomatosis, Churg-Strauss syndrome, or microscopic-polyantitis. The patient started 40 mg of prednisone and the symptoms improved. Two weeks later, an abdominal CT showed improvement of both pancreas swelling and rectal thickening. Regarding these findings, a diagnosis of type 2 autoimmune pancreatitis (AIP) with concomitant UC was reached according to the international consensus diagnostic criteria.

Type 2 AIP is a rare inflammatory condition that can be difficult to diagnose accurately. UC may co-occur in patients with type 2 AIP. Pathologic findings such as granulocystic and lymphoplasmacytic acinar infiltration without or lacking IgG4-positive cells on EUS-FNB and steroid responsiveness are crucial for diagnosis of type 2 AIP. Based on our experience, type 2 AIP should be considered

in the differential diagnosis of young patients with acute pancreatitis of unknown etiology with UC.

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CONFLICT OF INTEREST STATEMENT

None declared.

REFERENCES

- Pattabathula K, Waters PS, Hwang J, Bettington M, Singh M, Bryant RD, et al. Diagnostic and therapeutic considerations in biopsy-proven type 2 autoimmune pancreatitis: comparative analysis with biopsy-proven type 1 autoimmune pancreatitis. ANZ J Surg 2021:91:907-14.
- Masood M. Autoimmune pancreatitis: what we know so far. JGH Open 2022;6:3-10.
- de Pretis N, Crinò SF, Frulloni L. The role of EUS-guided FNA and FNB in autoimmune pancreatitis. Diagnostics (Basel) 2021;11: 1653.