Images for Surgeons

Autoimmune Pancreatitis with Obstructive Jaundice: Images for Surgeons

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Autoimmune pancreatitis (AIP) with typical image findings and complete resolution of pancreatitis after steroid therapy is presented for "images for surgeons". A computed tomography (CT) scan showed diffuse enlargement of the pancreas and biliary tree dilatation, but without dilatation of the pancreatic duct. After steroid treatment, the pancreatitis resolved, and a follow-up CT scan revealed normal size and contour of the pancreas. Therefore, the typical image findings with diffuse or segmental narrowing of the main pancreatic duct with irregular wall and diffuse or localized enlargement of the pancreas should suggest the possibility of AIP, and may help avoid unnecessary surgical operations.

Key words: autoimmune pancreatitis, steroid, immunoglobulin

A 77-year-old man presented with progressive, painless, afebrile and unremittent jaundice for two weeks. Besides, epigastric pain, clay stools and body weight loss were also noted. Serum biochemical data showed a picture of obstructive jaundice. The serum levels of amylase and lipase were within normal limits. Serum tumor markers, including carbohydrate antigen 19-9 and carcinoembryonic antigen, were also not remarkable. Computed tomography (CT) examination of the abdomen showed diffuse enlargement of the pancreas and biliary tree dilatation, but no dilatation of the pancreatic duct, and no obvious localized mass in the pancreatic head could be identified (Fig 1). The immunological studies showed elevation of serum immunoglobulins (Ig G = 2320 gm/dl and Ig M = 613 gm/dl). Because of persistent obstructive jaundice and undetermined diagnosis for the pancreatic lesion, the patient underwent a biliary bypass with end-to-side choledochoduodenostomy and core-needle biopsies. The pathological examination revealed chronic pancreatitis with non-specific lymphocytic infiltration and scattered eosinophils. Under the diagnosis of autoimmune pancreatitis (AIP), the patient was treated with steroid medication (prednisolone 40 mg daily for 1 month with gradual tapering). Two months after the steroid treatment, a follow-up CT scan revealed normal size and contour of the pancreas (Fig 2), and serum Ig G returned to the normal level (=1070 gm/dl).

AIP is not recognized until Yoshida et al unveiled the clinical pictures of AIP in 1995.[1] Nowadays, AIP is considered to be a discrete entity worldwide and many cases have been reported. AIP typically presents with a mass or diffusely enlarged gland that can mimic pancreatic adenocarcinoma. Therefore, without this knowledge, many unnecessary Whipple procedures (pancreatoduodenectomy) might be performed.[2-9]

At present, there are 3 major sets of diagnostic criteria for AIP proposed in Japan, Korea, and the United

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