Pseudotumor of the bile duct associated with autoimmune pancreatitis

Autoimmune pancreatitis is a well-established entity that can be associated with biliary abnormalities [1]. Peroral cholangioscopic images of such biliary lesions are rarely available, however. We report here a patient with autoimmune pancreatitis who was found to have a pseudotumor in the bile duct.

A 69-year-old man with epigastric pain and general fatigue underwent transabdominal ultrasonography and computed tomography, which revealed a swollen pancreas and dilatation of the common bile duct. Though he did not have obstructive jaundice and had normal levels of gamma-immunoglobulin, endoscopic retrograde cholangiopancreatography (ERCP) showed that he had a stricture in the lower bile duct and an irregular main pancreatic duct (Figure 1). Although the results of the imaging studies were suspicious of autoimmune pancreatitis, the patient was observed without medication.

Eight months later he was hospitalized because he had developed obstructive jaundice. ERCP showed a polypoid lesion in upper bile duct, without a stricture of either the pancreatic duct or the distal bile duct (Figure 2). Peroral cholangioscopy revealed a tumor-like lesion with a thick vessel in the bile duct (Figure 3). The level of immunoglobulin G subclass 4 (IgG4) was measured this time and was found to be high (857 mg/dl). A biopsy specimen from the lesion showed non-neoplastic bile-duct mucosa with fibrosis and lymphocyte and plasma cell infiltrations (Figure 4). We made a diagnosis of autoimmune pancreatitis with pseudotumor in the bile duct. The patient was treated with oral prednisolone (40 mg/day), and the jaundice improved immediately. Six months later, ERCP showed improvement in the narrowing of the bile duct, and peroral cholangioscopy revealed that the pseudotumor had disappeared. Three years after starting treatment, he is now on 5 mg prednisolone daily.

References


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Figure 1 The initial endoscopic retrograde cholangiopancreatogram (ERCP) showed narrowing of the main pancreatic duct and a stricture in the lower bile duct.

Figure 2 On re-admission 8 months later, the patient underwent another ERCP, which showed an upper bile duct stricture without a stricture of the distal bile duct.

Figure 3 Peroral cholecystoscopy revealed a submucosal tumor and a tumor-like vessel in the bile duct.

Figure 4 Histological examination of the biopsy specimens showed fibrosis with chronic inflammatory cell infiltrates (hematoxylin & eosin stain, × 200 magnification).