IgG4-related sclerosing cholangitis involving the gallbladder mimicking a hilar cholangiocarcinoma

A 76-year-old man presented with abdominal pain, jaundice, and fever. Abdominal computed tomography demonstrated wall thickening of the gallbladder with gallstones surrounding a large low-density lesion communicating with the gallbladder and a thickened, enhancing wall at the hepatic hilum and common hepatic duct (CHD). Magnetic resonance cholangiopancreatography (MRCP) showed a stricture at the hilum extending to the CHD, suggestive of a hilar cholangiocarcinoma (Fig. 1). Percutaneous catheter drainage for liver abscess and endoscopic retrograde cholangiopancreatography with stent placement for biliary drainage and biopsy was performed. Histology did not show malignancy. Same-session endoscopic ultrasound (EUS)-guided tissue acquisition and peroral cholangioscopy (POCS) were performed. EUS revealed symmetrical and smooth wall thickening of the hilum and CHD. EUS-guided tissue acquisition was performed using a 22-gauge needle (Fig. 2). POCS (SpyGlass DS; Boston Scientific, Natick, Massachusetts, USA) demonstrated a stricture with dilated vessels and hyperemic and papillary-appearing mucosal projection. SpyBite forceps biopsy specimens were taken from the abnormal mucosal lesions.

Fig. 1 Magnetic resonance cholangiopancreatography (MRCP) showing bile duct stenosis (arrowheads) in the hepatic hilum extending to the common hepatic duct, suggestive of a hilar cholangiocarcinoma.

Fig. 2 Endoscopic ultrasound (EUS) showing symmetrical and smooth wall thickening (thin arrows) of the hepatic hilum and CHD, and EUS-guided tissue acquisition using a 22-gauge needle (open arrow) was performed for the biliary lesion.

Video 1 Peroral cholangioscopy reveals a stricture with dilated vessels, a hyperemic, edematous mucosal surface, and a papillary-appearing mucosal projection. SpyBite forceps biopsy specimens were taken from the abnormal mucosal lesions.

Fig. 3 Histology of endoscopic ultrasound-guided fine-needle aspiration/biopsy and SpyBite forceps biopsy: a stromal fibrosis with lymphoplasmacytic infiltration (H&E, ×200); b more than 10 IgG4-positive plasma cells per high-power field (IgG4 stain, ×400).
cells per high-power field (HPF) (Fig. 3). Serum IgG4 level was 185 mg/dL. Laparoscopic cholecystectomy was performed, and on histology the wall of the gallbladder showed multifocal lymphoplasmacytic infiltrations with more than 10 IgG4-positive plasma cells per HPF. The patient received steroid treatment at a dosage of 40 mg/day. After 4 weeks of steroid treatment, MRCP demonstrated improved luminal narrowing of the hilum and CHD (Fig. 4). Therefore, IgG4-related sclerosing cholangitis involving the gallbladder was diagnosed. The patient was placed on long-term low-dose steroid treatment, the biliary stent was removed, and the patient has now had no recurrence of the cholangitis for over 1 year. IgG4-related sclerosing cholangitis is difficult to differentiate from malignancy [1]. EUS-TA and POCS may be a useful modality for evaluating indeterminate hilar strictures [2, 3].

Yun Chae Lee1, Hyung Ku Chon2, 3 Keum Ha Choi4
1 Department of Internal Medicine, Jeonbuk National University Hospital, Jeonju, Republic of Korea
2 Department of Internal Medicine, Wonkwang University Medical School and Hospital, Iksan, Republic of Korea
3 Institution of Wonkwang Medical Science, Iksan, Republic of Korea
4 Department of Pathology, Wonkwang University Medical School and Hospital, Iksan, Republic of Korea

Corresponding author

Hyung Ku Chon, MD
Department of Internal Medicine, Wonkwang University Medical School and Hospital, 895 Muwang-Ro, Iksan, Jeonbuk 54538, Republic of Korea
gipb2592@wku.ac.kr

References


Funding

Wongkwang University 2022

Competing interests

The authors declare that they have no conflict of interest.

The authors

Yun Chae Lee, Hyung Ku Chon, Keum Ha Choi

Corresponding author

Hyung Ku Chon, MD
Department of Internal Medicine, Wonkwang University Medical School and Hospital, 895 Muwang-Ro, Iksan, Jeonbuk 54538, Republic of Korea
gipb2592@wku.ac.kr

Lee Yun Chae et al. IgG4-related sclerosing cholangitis... Endoscopy | © 2022. Thieme. All rights reserved.