Double Bile Duct and Gallbladder Cancer Associated with Pancreaticobiliary Maljunction

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Picture 1. (A) Plain abdominal CT showed gallbladder polyps (arrow). Contrast-enhanced CT showed enhancement of the polyps and gallbladder wall (data not shown). (B) Right hepatic angiography showed hypervascularity at the bottom of the gallbladder (arrow head). (C) Intraoperative cholangiography through the cystic duct after cholecystectomy. Accessory bile duct bifurcated from the right hepatic bile duct, descended behind the common bile duct, and joined the main pancreatic duct (white arrow).

A 62-year-old, asymptomatic woman was found to have gallbladder polyps during a medical checkup with ultrasonography. Physical findings and laboratory data were normal. Computed tomography showed gallbladder polyps, without accompanying gallbladder stones (Picture 1A). Angiography showed hypervascularity at the bottom of the gallbladder (Picture 1B). Magnetic resonance cholangiopancreatography and endoscopic retrograde cholangiopancrea-

tography showed double bile duct (DBD) and pancreaticobiliary maljunction (PBM). Cholecystectomy and segmental hepatectomy were performed. Intraoperative cholangiography clearly revealed DBD and PBM (Picture 1C). Amylase levels in the common bile duct and gallbladder were extremely high (10,210 IU/L and 41,260 IU/L, respectively). Histopathological examination revealed gallbladder cancer (GBC; Picture 2).

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Picture 2. (A) Macroscopic appearance of the gallbladder. There were multiple gallbladder polyps. The largest one was 20×30×5 mm in size. (B,C) Histopathological examination showed gallbladder papillary adenocarcinoma (Hematoxylin and Eosin staining).

GBC may result from activated pancreatic enzymes stimulating mutagenicity due to PBM (1). Early diagnosis and treatment is desirable, because cancer risk increases with

age in patients with PBM (2). Preoperative anatomical evaluation of an aberrant bile duct is important to prevent intraoperative complications (3).

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