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Surgical management of biliary cystadenoma and cystadenocarcinoma of the liver

Y.W. Chen, C.H. Li, Z. Liu, J.H. Dong, W.Z. Zhang and K. Jiang

Department of Hepatobiliary Surgery, Hepatobiliary Surgical Institute, Chinese PLA General Hospital, Beijing, China

Corresponding author: K. Jiang
E-mail: JiangK301@126.com

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ABSTRACT. Biliary cystadenoma (BCA) and biliary cystadenocarcinoma (BCAC) are rare biliary duct neoplasms. This study investigated reasonable management strategies of cystic neoplasms in the liver. Charts of 39 BCA/BCAC patients (9 males, 30 female; median age 53.74 ± 14.50 years) who underwent surgery from January 1999 to December 2009 were reviewed retrospectively. Cyst fluid samples of 32 BCA/BCAC patients and 40 simple hepatic cyst patients were examined for the tumor markers carbohydrate associated antigen 19-9 (CA19-9) and carcinoembryonic antigen (CEA). The most frequent symptoms were abdominal pain (N = 10), abdominal mass (N = 7), abdominal distension (N = 4), jaundice (N = 2), and fever (N = 3); the remaining patients showed no clinical symptoms. Liver resection (N = 17) or enucleation (N = 22) was performed in the 39 patients. Ultimately, 35 patients were diagnosed with intrahepatic BCA and four patients were diagnosed with BCAC. The median CA19-9 level was significantly higher in BCA/BCAC patients than in simple hepatic cyst patients. The median CEA levels in BCA/BCAC patients and controls were 6.83 ± 2.43 and 4.21 ± 2.91 mg/L, respectively. All symptoms were resolved after surgery, and only one BCAC patient showed recurrence. The incidence of intrahepatic cystic lesions was 1.7%. Increased

CA19-9 levels in the cyst fluid is a helpful marker for distinguishing BCA/BCAC from common simple cysts. The presence of coarse calcifications is suggestive of BCAC. Complete surgical removal of these lesions yielded satisfying long-term outcomes with a very low recurrence rate.

Key words: Biliary cystadenoma; Cystadenocarcinoma; Enucleation; Hepatic resection; CA19-9

