Case Report

Large Benign Polyp of the Extrahepatic Bile Duct (Mimicking Bile Duct Cancer)

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An 85-year-old woman was admitted because of epigastric pain. The endoscopic examination showed the presence of duodenal ulcer. Abdominal ultrasonography and computed tomography revealed a dilatation of the common bile duct, but no apparent stones were seen in the biliary tract including the gall bladder. In addition, endoscopic retrograde cholangiography showed a filling defect, 20x30 mm in size, in the extrahepatic bile duct. The laboratory data and serum tumor makers were within normal limits. Carcinoma of the extrahepatic bile duct was tentatively made. At operation, an exploration using cholangioscopy and ultrasonography failed to reveal any malignancy. She underwent a local excision of the biliary tumor. Histological examination of the resected specimen showed a benign papillary adenoma. This case is herein reported because of rarity of the disease, which was incidentally found.

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Introduction

The occurrence of benign polyps in the biliary tract are comparatively rare^{1,2)}. Most of the early cancers of the bile duct reported have been polyps^{3,4)}. In addition, several reports have suggested a relationship between adenoma and cancer in the biliary tract^{5,6)}. It is therefore difficult to determine whether biliary polyps are benign or malignant at preoperative examinations.

We herein report a case of papillary adenoma aris-

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ing from the extrahepatic bile duct.

Case report

An 85-year-old woman complained of epigastric pain. Physical examination revealed tenderness in the epigastric region. She had been operated on for a closure of the duodenum due to a perforated ulcer on 1993. The laboratory data, including the carcinoembryonic antigen and carbohydrate antigen 19-9 levels in the serum, were all within normal limits. The endoscopic examination revealed a duodenal ulcer. Ultrasonography showed dilatation of the extrahepatic bile duct. Computed tomography revealed dilatation and a mass region in the extrahepatic bile duct (Fig. 1). Endoscopic retrograde cholangiography disclosed a 20 x 30 mm filling defect in the common bile duct (Fig. 2).

At operation which was performed on August 21,1996, the common hepatic duct was found to be dilated. A mass was palpated in the anterior wall of the

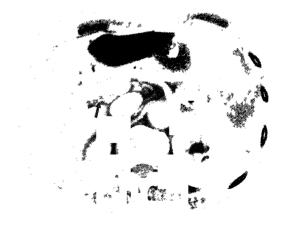


Figure 1. Computed Tomography showed the dilatation of the extrahepatic bile duct.



Figure 2. Endoscopic retrograde cholangiogram showed a filling defect measuring $20\ x30\ mm$ in diameter the extrahepatic bile duct.

bile duct at the junction of the cystic and common hepatic duct. There was no evidence of involvement of the perineural lymph node or direct invasion of the tumor into adjacent vascular system. No abnormality was seen in the liver or pancreas on intraoperative ultrasonography. The common hepatic bile duct was opened, and a 20 x 30 mm papillary polyp was removed by a wedge resection. Stones or other tumor in the gall-bladder or biliary tract was not seen on the intraoperative ultrasonography and choledochoscopy. The repair of the biliary duct was done by interrupted sutures. Histopathologic diagnosis of surgical specimen was papillary adenoma with no evidence of malignancy (Fig. 3a,b).

The postoperative course has been uneventful and she has been doing well 54 months after surgery.

Discussion

Benign polyp of the common bile duct are rare. Clinical findings of benign tumors in the bile duct are jaundice, pain and fever caused by luminal obstruction and cholangitis. Our patient had epigastralgia but this was probably due to duodenal ulcer.

The biliary tumor is diagnosed preoperatively by a combination of ultrasonography, computed tomography and cholangiography. Endoscopic retrograde cholangiography or percutaneous transhepatic cholangiography

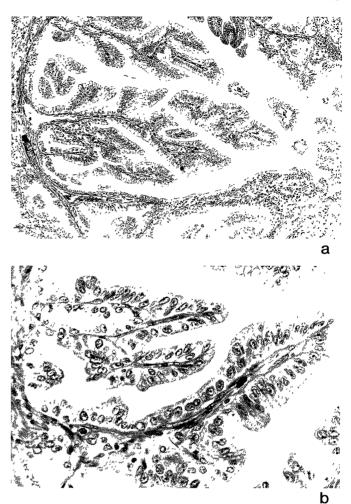


Figure 3. a, b Microscopic features of the resected bile duct tumor (Hematoxylin and Eosion).a. low magnification view of the lesion (x10). A papillary proliferation of the bile duct glands extending to the lumen without invasive growth. b. high magnification view (x100). The epithelium is composed of tall and columnar cells which accompanied the polarity of nucleus and thin stroma. No features of malignancy were observed.

are useful in diagnosing tumors of the bile duct based on the location, shape and spread of the tumor along the biliary tract. However it is difficult to determine whether a polyp is malignant or benign. Because most of the early bile duct carcinoma reported are polypoid and are similar to benign polyps in shape^{7,8)}. Moreover, several reports have suggested the existence of some relationship between adenoma and carcinoma in gall bladder⁵⁾ and extrahepatic bile duct⁶⁾. Kozuka et al⁵⁾. reported that the benign adenomas ranged in size from 3 to 12 mm in diameter, while adenomas with malignant change ranged from 12 to 35 mm in diameter. Also biliary cancer has characteristic of involvement of perineural lymph space or direct invasion of the tumor into adjacent vascular

system by ultrasonography, computed tomography. Otherwise, the preoperative and intraoperative findings were no invasion of the organ and lymph node metastasis around the biliary duct in spite of an intensive exploration. In this case, the tumor was also easy to resect because the tumor was on the anterior wall of the biliary duct and bile duct was dilated. This case has been done complete resection of the biliary tumor in pathological findings.

A local excision is a treatment of choice for solitary benign tumors of the biliary tree, with a tumor free margin to minimize the possibility of recurrence^{9,10}, and intraoperative choledochoscopy and ultrasonography should also be performed to confirm a complete clearance of the biliary duct. This case has potential of other region of extrahepatic bile duct, gall bladder and intrahepatic bile duct because case of diffuse biliary papillomatosis has been reported¹¹⁾. Postoperative observations using ultrasonography and computed tomography must also be regularly performed.

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