

Adenoma of the Distal Common Bile Duct —A Case Report—

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— Abstract —

On rare occasions, Obstructive Jaundice may be caused by a benign tumor of the biliary tract. We describe a patient in whom the diagnosis of an adenoma of the distal common bile duct (CBD) was established. The CT showed a soft tissue density mass in the distal CBD and diffuse dilatation of the intrahepatic duct, gall bladder, and CBD. Endoscopic retrograde cholangiopancreatography showed an irregularly marginated polypoid mass in the distal CBD. The clinical, radiological, and histological features of this neoplasm are reviewed.

Index Words: Bile ducts, CT 76.1211

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Introduction

Benign bile duct tumors are rare causes of obstructive jaundice and are frequently found in the periampullary region or in the common bile duct. Among them, papilloma and adenoma are the most common (1-5). Recently, we experienced a case of adenoma of the distal CBD which could not be differentiated from cholangiocarcinoma. The clinical, radiological and histological features of this neoplasm are reviewed.

Case Report

A 54-year-old female was admitted to our hospital in June 1990 because of jaundice. She was well until May 1990, when she noticed jaundice, dark urine, clay-colored stool, and epigastric discomfort. She visited a local hospital and was transferred to our hospital for further evaluation of obstructive jaundice.

On admission, she complained of nausea, vomiting, and weight loss of 8kg. She was jaundiced and appeared acutely ill. The liver was palpable 3cm below the right costal margin. At this time her total serum bilirubin was 22.4 mg/dl with 17.6 mg/dl of direct bilirubin. The serum alkaline phosphatase was 306 IU/L.

A CT of the abdomen demonstrated dilated intrahepatic ducts, gall bladder, and CBD with an intraluminal soft tissue density filling the distal CBD (Fig. 1). Endoscopic retrograde cholangiopancreatography revealed an irregularly marginated lobulating intraluminal mass in the distal CBD (Fig. 2).

Under the impression of a distal CBD cancer, Whipple's operation was performed, and an approximately 2.5cm×2.5cm-sized papillary tumor was detected in the lumen of the distal CBD. The tumor extended to the ampulla of Vater.

Microscopically, there was a proliferation of

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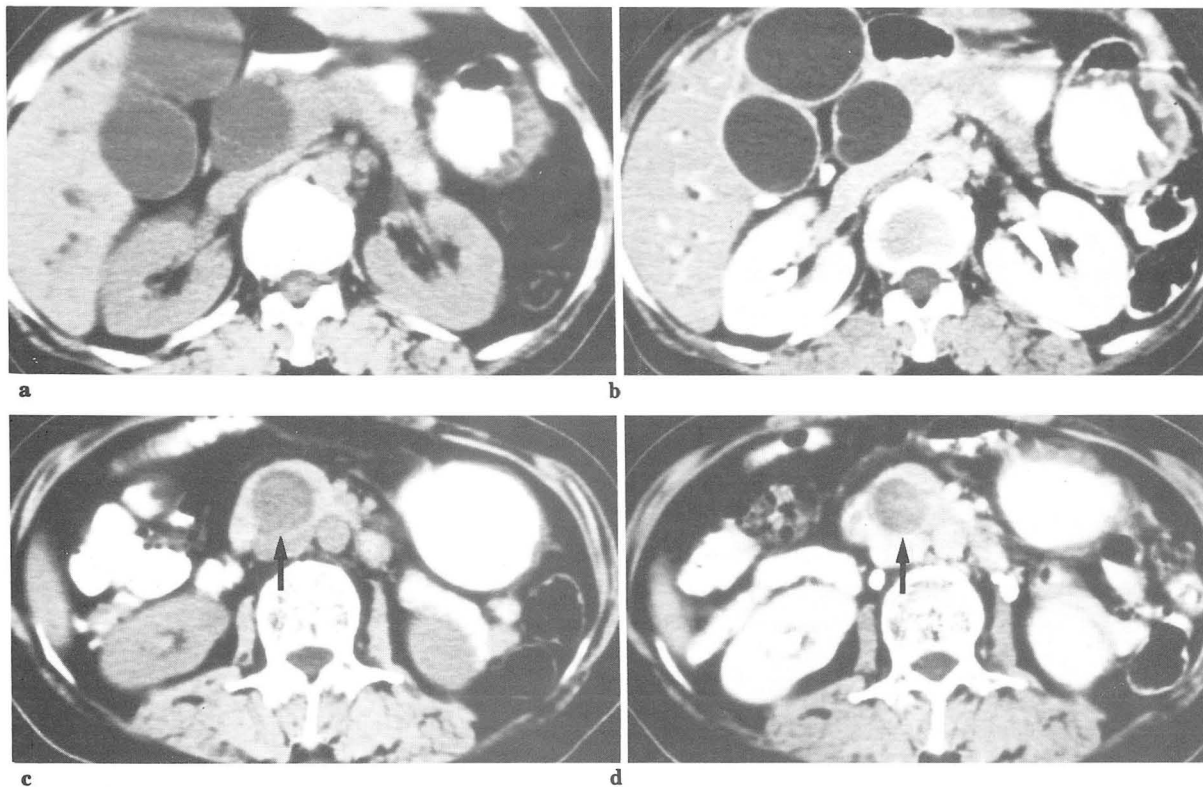
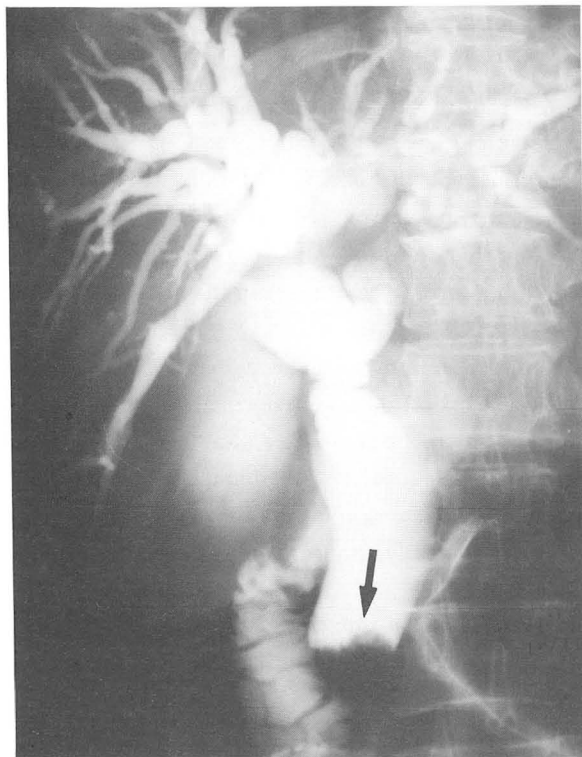


Fig. 1. CT of the case.

Pre-(a, c) and post-enhanced CT scans (b, d) show a diffuse dilatation of the common bile duct and gallbladder with an intraluminal mass in the distal common bile duct (black arrows in c and d).



epithelial cells forming irregular glands, whose nuclei were hyperchromatic, elongated, crowded and mitotic. There was no stromal invasion suggesting a malignancy (Fig. 3). The final diagnosis was an adenoma of the distal CBD.

Discussion

The usual clinical picture of a benign tumor of the bile duct is that of a gradual onset of relatively persistent and severe obstructive jaundice, frequently indistinguishable from that caused by a stone or malignant tumor. There may be mild or moderate pain, nausea, and vomiting, but these are by no means constant (1, 2).

In 1950, Chu reviewed 31 cases of benign

Fig. 2. Cholangiography of the case.

ERCP demonstrates the feathery marginated intraluminal mass at distal common bile duct (black arrow).



Fig. 3. Microscopic finding of a tumor section shows a proliferation of epithelial cells forming irregular glands. The nuclei of the cells are hyperchromatic, elongated, crowded and show many mitoses. There is no stromal invasion suggesting a malignancy (X40, H and E stain).

neoplasms of the extrahepatic biliary ducts which were confirmed histologically. The type and frequency of lesions in his series were as follows: sixteen adenomas, 10 papillomas polyps, 3 neuromas and 2 fibromas (3).

Burhans analyzed 88 cases of benign neoplasms of the extrahepatic biliary tree including 84 cases from the literature and 4 cases from his own experience. According to him, epithelial tumors (41 papillomas, 39 adenomas) were most common. A variety of less common types of tumors in the extrahepatic biliary tree (4 granular cell myoblastomas, 1 fibroma, 1 neuroma, 1 leiomyoma, 1 harmartoma) were also reported. Twenty were located at the ampulla, 36 in the CBD, 5 in the cystic duct, 11 in the common hepatic duct, 7 in the left hepatic duct, and 2 in the aberrant ducts on the inferior surface of the right lobe of the liver. Four tumors had multiple sites of origin and in 3 the locations were not documented (4).

Papilloma, a prevalent type of the benign ex-

trahepatic bile duct tumor, has been infrequently found to involve the full extent of the extrahepatic biliary tree including the ampulla. The multifocal origin of this tumor and the cellular atypia which might be a prelude to a malignancy, could be attributed to its tendency to recur if radical surgery is not performed (1, 4, 5).

Adenoma is usually single. Cellular atypia has been reported in certain cases of this tumor. It may also recur but with less frequency than that of the papilloma (1, 4, 5). Adenoma usually has a feathery margin on cholangiography (6), and so it is difficult to differentiate it from the other malignant lesions radiologically.

Although rare, benign neoplasms should be considered in the differential diagnosis of obstructive jaundice, since they are usually curable by a simple excision.

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<국문요약>

원위부 총수담관의 선종

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양성 종양이 드물게 폐쇄성 황달의 원인이 되나 방사선학적 소견상 악성 종양과의 감별이 어렵다. 최근 저자들은 원위부 총수담관에 생긴 선종을 경험하여 문헌 고찰과 함께 방사선학적 소견을 보고하는 바이다.