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ON THE MIRIZZI SYNDROME
—BENIGN STENOSIS OF THE HEPATIC DUCT INDUCED
BY A STONE IN THE CYSTIC DUCT OR THE
NECK OF THE GALLBLADDER—

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Summary

Three cases of Mirizzi Syndrome are reported.

One of them was induced by the stone in gallbladder remnant.

On the cholangiogram, one case showed narrowing of common hepatic duct near the porta hepatis, and one case revealed a tapered narrowing-like stenosis. Those findings resembled malignancy but closer examination could differentiate this syndrome from malignancy.

Selective angiography was useful to differentiate the syndrome from malignancy.

Even in the cases where stricture is severe, extirpation of gallbladder or cystic duct, freeing the anterior wall of extrahepatic bile duct from marked hyperplasia of fibrous tissues and insertion of a T-tube as an internal splint through the stenosis were effective.

It is the opinion of the authors, therefore, that the reconstruction of a strictured bile duct may not necessarily be done by resection of stricture and a hepatojejunostomy.

Key Words: Mirizzi syndrome, benign stenosis of the common hepatic duct in gallbladder stones.

Mirizzi syndrome is a clinical entity which is a part of the "sindrome anatomofuncional del hepatico" advocated by Mirizzi1). This syndrome consists of a benign stricture of the common hepatic duct induced by a stone in the cystic duct or the neck of the gallbladder and inflammatory reaction to the stone. And an anatomical arrangement of the cystic duct (parallel or spiral course) favors this2-4). This lesion may result in recurrent cholangitis2-8). The syndrome is important, because it may be difficult to differentiate this lesion from malignancy not only preoperatively but also during operation, and overlooking this lesion at operation results in postcholecystectomy complications.

We report three cases of the syndrome.
Case Report

Case 1. A 46-year-old woman was hospitalized for epigastric pain. Eight years earlier cholecystectomy had been done at another hospital and postoperative course was uneventful. The patient was troubled by episodes of right upper quadrant and epigastric pain for about one year. Jaundice has not been recognized. On admission, laboratory studies included serum total bilirubin 0.7mg/dl, SGOT 140 U, SGPT 170 U, alkaline phosphatase 17.4 KAU.

Percutaneous transhepatic cholangiography (PTC) revealed severe narrowing of the common hepatic duct near the cystic duct. At first sight the lesion seemed to have developed surrounding the common hepatic duct. However, in closer examination the obstructive lesion appeared to be coming from the lateral aspect only. Also the hepatic duct contour was not irregular and those findings suggested a non-malignant process (Fig. 1).

Selective celiac angiography was done for differential diagnosis from cancer of the gallbladder. At arterial phase, cystic artery was well visualized and any findings of malignancy (abrupt occlusion, irregularity of the contour and tumor vessel) were not recognized (Fig. 2). At venous phase, abnormal findings such as irregularity of the contour or partially occluded segment of the portal vein was not seen (Fig. 3).

At operation, a remnant gallbladder was found with a 1.5 cm. cholesterol stone and the common hepatic duct was surrounded with marked hyperplasia of fibrous tissues which might be induced by inflammation of the gallbladder (Fig. 4).

Extirpation of the remnant gallbladder and the cystic duct, freeing the anterior wall of extrahepatic bile duct from the fibrous tissues and insertion of a T-tube as an internal splint from the common bile duct through the stenosis into the common hepatic duct were done.

Pathologic examination revealed marked infiltration of the inflammatory cells, erosion and granulomatous tissues in the gallbladder.

Fig. 1. Case 1. PTC before the operation.

Fig. 2. Case 1. Arterial phase of selective celiac angiography.