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Unusual cause of common bile duct dilatation in asymptomatic elderly patient: right hepatic artery syndrome

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To the Editor

Obstructive jaundice by vascular compression is extremely rare. Luttwak and Schwartz first described jaundice due to an obstruction of the common hepatic duct by an aberrant artery.[1] Compression of extrahepatic bile duct (EBD) by right hepatic artery was defined as right hepatic artery syndrome. We present here a rare case of asymptomatic biliary obstruction due to compression of the common bile duct by right hepatic artery.

A 74-year-old female presented with slight epigastric pain. Her past medical history and physical examination were unremarkable. On laboratory examination, alkaline phosphatase, gamma-glutamyl transpeptidase, total biluribin, aspartate aminotransferase and alanine aminotransferase were normal. Ultrasonography revealed moderate dilatation of common bile duct and intrahepatic ducts. Abdominal computerized tomography (CT) showed compression from the dorsum and stenosis of the EBD by the right hepatic artery, but did not reveal a mass or lymph node swelling around EBD. Proximal and distal choleduct was 9.7 mm and 6.8 mm, respectively (Figures 1A, 1B). MRCP showed a stenotic lesion at the level of the upper common hepatic duct. Hepatic artery was normal at CT angiography. Since she was asymptomatic, we decided on regularly follow-up in the out-patient.

Compression of the EBD by the right hepatic artery has been reported as a right hepatic artery syndrome. Anatomic variations of biliary tract are found frequently. Among these variations, some reports have described anatomically variable vasculature of the hepatic artery.[2] Koops represented that the finding of 604 selective angiographies showed normal anatomy of the hepatic artery in 79.1% and the anomalous arterial patterns in the remaining.[3]

Because of previous cases were symptomatic, almost all were operated.[4,5] Our case was asymptomatic, hence we advice to regular follow-up as out-patient.

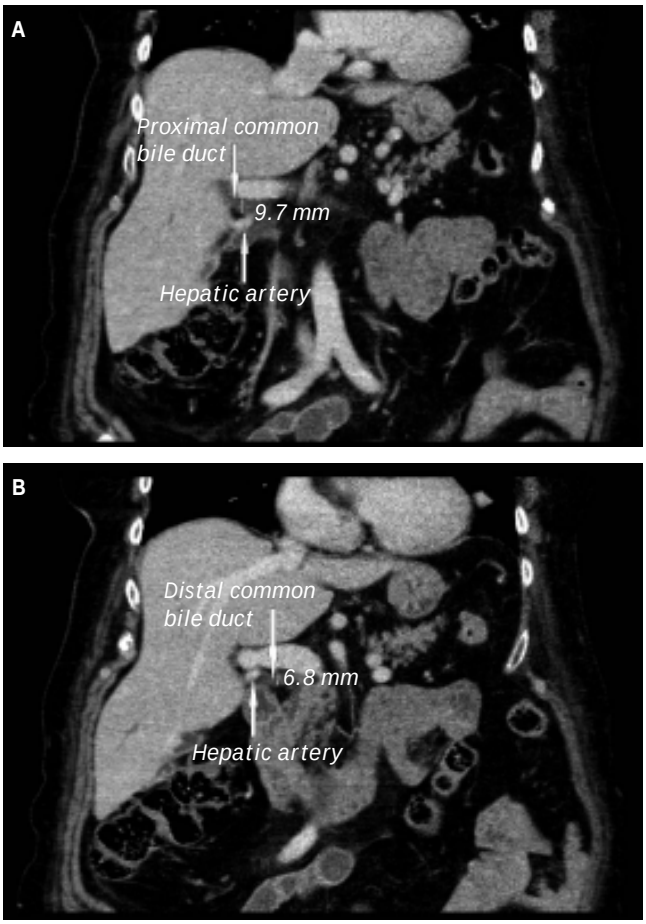

***Figure 1. A** and **B.** Abdominal computerized tomography (CT): compression of the extrahepatic bile duct by the right hepatic artery.*

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In conclusion, arterial compression should be among the differential diagnosis of extrahepatic biliary obstruction.

DISCLOSURE OF INTEREST

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