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Case Report

Incidental bile duct adenomas in a patient with obstructive jaundice

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Adenoma of the bile duct is an uncommon tumour of uncertain pathogenesis. It is benign but can potentially lead to misinterpretation of small liver nodules detected during laparotomy as malignant. We report a case of incidental intra-hepatic bile duct adenoma discovered during laparotomy for obstructive jaundice, secondary to gallstones.

CASE REPORT A 43-year-old lady presented with a two week history of right upper quadrant pain and jaundice. Liver function tests revealed an obstructive picture. Ultrasound and CT scans of the abdomen were suggestive of obstruction due a stone in the lower common bile duct (CBD). However there was no evidence of CBD or intrahepatic duct dilatation. The liver parenchyma appeared normal on ultrasound and CT scanning. An ERCP was technically unsuccessful. Because of the concern regarding the nature of the pathology causing obstructive jaundice she was transferred to our care and underwent a laparotomy. This revealed two small lesions, both measuring 11mm in diameter on the surface of the right lobe of the liver in segments V and VII, which had the appearances of metastatic deposits. These lesions gave concern at the time of operation as they were suspected to be due to secondary disease from a primary tumour obstructing the lower CBD. However no primary tumour was found. The gallbladder and hepatic pedicle were markedly oedematous and inflamed. A stone was palpable at the lower end of the CBD. The gallbladder was removed and the CBD explored. A gallstone was removed with a Fogarty balloon catheter. A post exploration cholangiogram and choledochoscopy were normal. Post operatively her jaundice settled and a T tube cholangiogram was normal. Histopathology of the liver biopsies gave a diagnosis of benign bile duct adenoma.

DISCUSSION

Bile duct adenoma (BDA) is a rare benign tumour of the liver comprising of disorganised but mature peri-biliary gland acini and tubules within a variable amount of stroma.[1] The true incidence of BDA is unknown but post-mortem studies have demonstrated the rarity of this condition. Cho et al [2] reported only 13 cases in a series of 2125 postmortems. Allaire et al[3] reported only 152 cases between 1943 and 1986, all of which were asymptomatic and diagnosed incidentally either at laparotomy or post-mortem. In one reported series, 38 patients were reviewed 156 months after diagnosis. Eight had died of unrelated conditions and the remainder showed no evidence of recurrence.[3] The majority of BDAs occurred between the ages of 20 and 70 years with a mean age of 55 years with no significant difference in sex distribution .[3] They are usually small in size ranging from one to 20mm but may occur as multiple nodules throughout the liver. [4] BDA is composed of non-cystic ductules without exhibiting cellular atypia or increased mitotic activity.[1] BDA has to be distinguished from bile duct harmatoma associated with von Meyenburg complex by the absence of polycystic disease of the liver and kidney.[1, 3, 5]

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Differentiation between bile duct adenomas and malignant lesions based on radiological findings is difficult [6] and accurate diagnosis of this condition requires histopathological examination. Detection by ultrasound and CT can be unreliable as small lesions may be missed. In this report, bile duct adenomas were not detected preoperatively using both imaging modalities.

In this case the incidental finding of BDA demonstrates the potential for misinterpretation of findings at operation and therefore diagnostic uncertainty. It further illustrates the importance of liver biopsy of any suspicious lesion identified at operation in order to obtain an accurate tissue diagnosis and to plan any subsequent investigations and management.

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