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Case Report

Accessory lobe of liver: intra-operative incidental finding: a rare case report

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ABSTRACT

An accessory lobe of liver is a rare congenital anomaly, but is usually an incidental finding during abdominal surgeries. The condition is usually asymptomatic. Here, we report a case where the accessory liver lobe was an incidental finding during laparoscopic Cholecystectomy. An accessory liver lobe resection should be done to prevent complications and malignant transformation.

Keywords: Accessory liver lobe, Laparoscopic Cholecystectomy, Ultrasonography

INTRODUCTION

An accessory liver lobe is a rare congenital and developmental anomaly often asymptomatic and usually discovered incidentally during imaging, surgery, or at autopsy.[1] It is a morphologic variation of the liver and is caused by excessive development.[2] It is a congenital variant in which hepatic tissue is additional to the normal lobes which may be connected to the main liver by a pedicle, or may be entirely separate (ectopic). Accessory liver lobe has been reported in fewer than 1 percent of abdominal surgeries or cadaveric examinations.[3] This condition is usually asymptomatic and seldom a detected preoperatively. Although, a rare entity, it can cause abdominal pain due to torsion and liver dysfunction.[4] Any pathological condition which occurs in this ectopic tissue usually occurs concurrently in the native liver.[5] Here we report a rare incidental case of an accessory liver lobe during laparaoscopic cholecystectomy.

CASE REPORT

A 35-year young female with no comorbidity who presented to us with symptomatic cholelithiasis: intermittent right upper quadrant pain, nausea, and dyspepsia. No prior surgical history. Physical examination was unremarkable and vitals were stable. Lab investigations were within normal range. Ultrasound abdomen was done which shows multiple calculi in gall bladder with normal hepatobiliary tree. The patient was posted for laparoscopic cholecystectomy and intra-operatively an accessory liver lobe separate from the normal liver and attached to gall bladder wall was found (Figure 1).

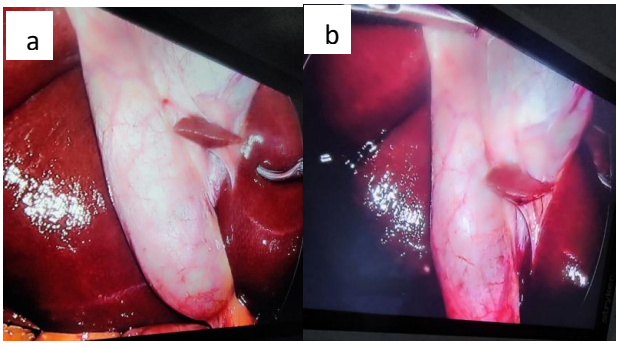

Figure 1 (a and b): Accessory liver on the gall bladder wall.

The accessory lobe had no separate biliary drainage visible at that time; no signs of torsion, or infarction; no adhesions

or inflammation around it. The decision was made to excise the accessory lobe together with the gallbladder. Laparoscopic cholecystectomy along with resection of accessory lobe of liver was done without any complication. The excised specimen was sent for histopathology. The patient was discharged on the next day. Follow up at 2 weeks and 1 month, with no complaints and normal liver function tests. Histopathology, grossly liver tissue adhered to the gallbladder wall and microscopically shows normal hepatic cords, sinusoids, and portal tracts. No signs of malignancy.

DISCUSSION

An accessory lobe of liver is a rare clinical entity; usually asymptomatic and is found incidentally during abdominal surgery or autopsy. This condition may present with recurrent abdominal pain and impaired liver functions.[1] The condition occurs due to an error in the formation of the endodermal caudal foregut during the third week of gestation and segmentation of the hepatic bud.[4] An accessory liver lobe remains in communication with the main liver, while an ectopic liver has no communication.[6] In the present case the accessory lobe was separate from the liver and attached to gall bladder wall. An accessory liver lobe is generally found at a number of locations, such as the liver undersurface, gastrohepatic ligament, gallbladder, near the umbilicus, adrenal glands, or pancreas.[7] On the other hand, ectopic liver can be found in any area, such as the intra-thoracic cavity, spleen, umbilicus, vena cava, heart, or lung.[8] An observational study revealed that the incidence of accessory liver lobe and ectopic liver is 0.7%.[9] An accessory liver lobe is classified into three types based on the biliary drainage and the presence or absence of a common capsule. Type I has a separate accessory lobe duct which drains into an intra-hepatic bile duct of the normal liver. Type II has a separate accessory lobe duct which drains into an extra-hepatic bile duct of the normal liver. Type III has an accessory lobe and a common capsule with the normal liver; the bile duct of the accessory lobe drains into an extra-hepatic duct.[10]

According to this classification, the present case corresponds to Type II. Another classification based on the position of the accessory liver lobe 5 (A) an accessory hepatic lobe that can reach a considerable size and is attached to the liver by a stalk, (B) a small accessory hepatic lobe attached to the liver (approximately 10–30 g in weight), (C) an ectopic liver, which is situated outside the liver without any connection to the liver, and (D) a microscopic ectopic liver, which is occasionally found in the wall of the gallbladder.[11] This present case was classified as type D. The detection of an accessory liver lobe is clinically important because it can be a source of liver dysfunction, torsion, bleeding, and hepatocellular carcinoma. It is very rare that a preoperative abdominal ultrasonography could detect an accessory liver lobe. Moreover, the accessory liver lobes are well adapted to laparoscopic resection.[12]

CONCLUSION

An accessory liver lobe should be resected to prevent complications, like torsion, haemorrhage, malignant transformation. Preoperative diagnosis can prevent complications during laparoscopic surgery, such as biliary duct injury and overall morbidity.

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