

Case Report

Accessory left lobe of the liver

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ABSTRACT

Accessory lobe of liver usually asymptomatic and its clinical detection is extremely rare. In the present case report an unusual case of an accessory left lobe of the liver in a female dead foetus of 36 weeks gestation, during the autopsy after exploring the abdominal cavity observed an unusual extra left lobe the liver, extra lobe is attached by means of a connecting stalk.

KEYWORDS: Accessory Lobe, Liver, Foetus, Gestation, Autopsy.

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INTRODUCTION

Gross abnormalities of the liver are rare in spite of its complex development. The more common gross abnormalities are irregularities in form, in the number of lobules and lobe [2]. Among these accessory lobes of the liver got an importance as these gives intermittent torsions due to their attenuated pedicles. Even though their occurrence may very rare, for the diagnostic and surgical interventions required to identify and limit the effects of intermittent torsions [2].

Case report

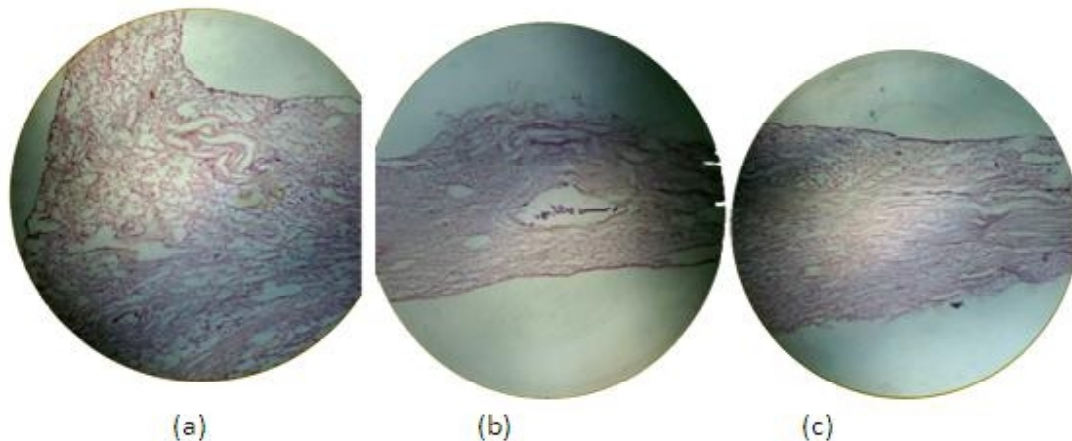
During routine foetal autopsy a female unknown dead foetus of 36 weeks gestation with CR length-32 cm CH length-36 cm and cause for the death of the foetus is not available, after

exploring the abdominal cavity observed a mass which is attached to the left lobe of the liver by means of a connecting stalk (Fig. 1), and we also noted other abnormalities such as left sided diaphragmatic hernia and hypoplastic left lung and unascended left sided kidney, which were reported as a case report by Ravindrakumar et al. [3] Furthermore accessory lobe morphometric measurements: Length of the connecting stalk=2 cm, Circumference of the stalk =3,2.5,2.5 (proximal, middle, distal), circumference of the lobe =1.5X1X4 cm and thickness= 3cm was subjected to routine histological procedure. Histological observation reveals that it is similar to hepatic tissue (Fig. 2: a, b and c).

Fig. 1: Showing an accessory left lobe of the liver



Fig. 2: Showing Histological structure of the accessory left lobe of liver.



- a. Microscopic photograph of accessory left lobe (10X, H&E stain)
- b. Microscopic photograph over middle of connecting stalk (10X, H&E stain)
- c. Microscopic photograph near proximal part (10X, H&E stain)

DISCUSSION

According to the Cullen, 1925, liver tissue in communication with main liver is termed as an accessory lobe, whereas if there is no communication with main liver termed as an ectopic liver [4].

Christine and colleagues described 4 types of abnormally positioned accessory liver lobes:

1. Liver tissue that is not connected to the main liver and is usually attached to the gallbladder or intra abdominal ligaments.
2. Microscopic ectopic liver occasionally found in the gallbladder wall.
3. Large accessory liver lobe attached to main

liver by stalk.

4. Small accessory liver lobe attached to main liver by stalk (10-30gm in weight).

In the present case we observed small accessory liver lobe attached to main liver by stalk which corresponds to the type 4 of the above description. And incidence is about 0.56% usually detected on autopsy or laparoscopy [7,8].

However some researchers (Choi Su, Kim HK, Kim J, 2008)[5] believe that ectopic and accessory liver lobe could lead to potential hepatocellular carcinoma development, hepatitis and torsion of accessory lobe.

Embryologically Brodley (1909)[8], explained the different causes for the accessory lobe of the liver, liver begins as a ventral growth of the endodermal tube. And liver and lungs are close proximity in relation with the developing diaphragm corresponding to the location of diaphragm defect in the present case result in long term compression of the firm margins of the developing diaphragm results in complete division of the liver parenchyma on left side in to two parts, which are connected by a connecting stalk, containing vessels which are essential for viability.

CONCLUSION

Form the present case report it is concluded that accessory lobe of liver on left side is an extremely rare in which the diagnosis is quite difficult. Accessory lobe should kept in mind while diagnosing the patients with hepatic carcinomas, on the other hand it is especially important to keep in mind these liver anomalies in the correction of preoperative diagnosis, as this will helpful for the surgeon in planning biliary surgery or Porto-systemic Anastomosis.

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