Original Research Paper



Anatomy

DIAPHRAGMATIC FISSURE OF LIVER- A CASE REPORT.

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We report a case of Diaphragmatic fissure on anterior surface of right lobe of liver seen in an adult male cadaver during ABSTRACT routine dissection. The fissure is vertically extending in the middle of the anterior surface of right lobe and extends till the inferior border. Length of the fissure is 9 cm and depth is 1.2 cm. Pons hepatis with 13mm length also seen in the same liver. Incidence of Accessory fissures of liver is 25% and frequency increases from 7th decade. 15% of the cadaveric livers may show accessory fissures. The knowledge of the diaphragmatic fissures may be utilized by Anatomists, Surgeons, Forensic specialists and Radiologists to avoid misdiagnosis and complications. When peritoneally disseminated tumor cells implant in such fissures, it may mimic intrahepatic lesions.

KEYWORDS: Accessory liver fissures, diaphragmatic fissures, accessory sulcus, cough furrow.

BACKGROUND

Morphological variations of the liver are a concern for Clinicians in interventional procedures, diagnosis and management of various Hepatobiliary disorders. Diaphragmatic fissure or Accessory liver fissure (ALF) may lead to misdiagnosis and surgical complications, if not identified.

Case Description

During routine dissection diaphragmatic fissure of liver was detected in an adult male cadaver at Department of Anatomy, Malabar Medical College Hospital & Research Centre. The fissure is vertically extending in the middle of the right lobe of liver in the anterior surface and extends till the inferior border. Length of the fissure is 10 cm and depth is 1.2 cm. Pons hepatis with 13mm length was also seen in the same liver. Gallbladder is smaller and embedded in the liver parenchyma.

RESULTS

A fissure was detected on the diaphragmatic surface of a liver a measuring 10cm in length and 1.2 cm in depth named as Diaphragmatic fissure or Accessory liver fissure.

DISCUSSION

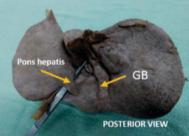
Diaphragmatic fissures or Accessory Liver Fissures (ALF) are commonly seen in the diaphragmatic surface of right lobe of the liver. Even though it is a common variation, it can be a concern for clinicians for diagnosis and management of Hepatobiliary disorders. It may mimic tumors, nodules and other malformations. Frequency of ALF is 25 % and frequency increases from 7th decade.

15% of the cadaveric livers may show accessory fissures. Data on ALF is not abundantly present in literature. These are named as "cough furrows" appearing due to chronic cough and hypertrophy of the diaphragm. In case of imaging studies of abdominal trauma or palpation during laparotomy the ALF may give false impression of liver laceration. When peritoneally disseminated tumor cells implant in such fissures, it may mimic intrahepatic lesions.

CONCLUSION

The knowledge of The Diaphragmatic fissures or Accessory Liver Fissures may be utilized by Anatomists, Surgeons, Forensic specialists and Radiologists to avoid complications during interpretation, diagnosis, autopsy and surgical procedures.









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