

**Case report***Copyright © All rights are reserved by Tafese Gudissa Merga*

Incidentally found Accessory Liver: A Case Report

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Background: Even though congenital anomalies of the hepatobiliary system are common, the accessory liver lobe is very rare. The exact cause is unknown. However, it is incriminated that it is the result of embryonic heteroplasia. The patients are usually asymptomatic, and it will be diagnosed incidentally. The accessory liver can be attached to the liver or ectopic one. Due to possible complications when it is detected intraoperatively it is better to resect.

Case Presentation: We report a case of a 3-year-old male patient who presented with a complaint of regurgitation and vomiting. He was diagnosed with a hiatal hernia and underwent surgery. During laparotomy, there was incidentally found accessory liver tissue which is completely separated from the liver. The mass was submitted for histopathology evaluation and showed normal liver tissue.

Clinical Discussion: Accessory liver is an extremely rare clinical scenario. Its exact cause is unknown, but it is incriminated that it is the result of embryonic heteroplasia and rarely also post trauma or surgery. The accessory liver lobe is usually found connected to the main liver tissue but rarely can be found completely separated from the main liver tissue. Patients with accessory liver lobes are usually asymptomatic. They become symptomatic when the accessory liver mass gets complicated. Due to its potential complications when it is found intraoperatively, it is recommended to remove it.

Conclusion: Since the vast majority of patients with accessory liver are asymptomatic, they are commonly diagnosed during surgery. Since there are reports of accessory liver torsion and hepatocellular carcinoma risk it is better to resect it if detected intraoperatively during unrelated surgery.

Keywords: Accessory liver; incidental finding; liver torsion

Introduction

Congenital anomalies of the hepatobiliary system are common. The accessory liver lobe is a rare clinical scenario. The cause is thought to be due to excessive liver growth. Its diagnosis is usually incidental but rarely can be symptomatic. The accessory liver lobe can be attached to liver tissue or completely separated from the liver tissue (ectopic liver). We are presenting a pediatric patient with a completely separated accessory liver lobe from the liver

tissue which was found incidentally while being operated for hiatal hernia.

Case Report

A 3-year-old male toddler presented with the complaint of regurgitation and vomiting of ingested matter since the age of 1 year and 8 months. The liver function test and liver enzyme were normal. An upper GI contrast study was done and the patient was

diagnosed with hiatal hernia. He underwent laparotomy for the diagnosis of hiatal hernia and fundoplication was done. During laparotomy, there was incidentally found accessory liver tissue, has a similar consistency and color to liver tissue. It is completely separated from the liver with its vascular pedicle. The mass was found to be just inferior to the visceral surface of the liver with no attachment to the liver and it measures about 4* 5cm (Figure 1). The mass was submitted for histopathology evaluation and showed normal liver tissue.

Discussion

The accessory liver lobe is a rare hepatobiliary system anomaly [1]. Its exact cause is unknown but it is incriminated that it is the result of embryonic heteroplasia and rarely also post trauma or surgery. The accessory liver lobe is usually found connected to the main liver tissue either pedunculated or sessile [2], but rarely

found as completely separated from the main liver tissue as in our case [3]. The location of the accessory liver lobe is commonly at the subhepatic area (i.e visceral surface of the liver), but can be found at the gastrohepatic ligament, around the pancreas, spleen, gallbladder [4] or adrenal gland; Even extra- abdominal like in intrathoracic is reported [5]. Patients with accessory liver lobe are usually asymptomatic but rarely complications can occur. The reported complications are torsion (with pedunculated accessory liver) [6], traumatic rupture, infarction [7], and hepatic dysfunction with hepatocellular carcinoma [8] (more with ectopic liver i.e. completely separated accessory liver lobe). Since there are reports of accessory liver torsion and hepatocellular carcinoma risk it is better to resect it if detected intraoperatively during unrelated surgery especially if it is pedunculated or completely separated (ectopic liver) type.

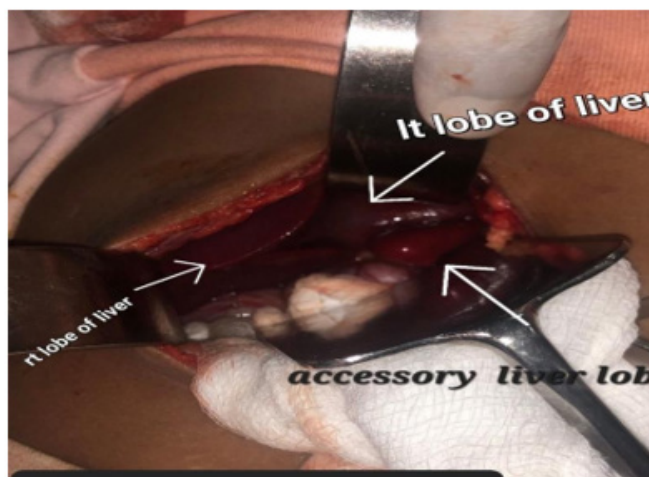


Figure 1: Intraoperative image showing ectopic accessory liver.

Conclusion

The accessory liver lobe is a rare anatomic anomaly. Since the vast majority of patients with accessory liver are asymptomatic, they are commonly diagnosed during surgery. However, since there are reports of accessory liver torsion and hepatocellular carcinoma risk it is better to resect it if detected intraoperatively during unrelated surgery especially if it is pedunculated or completely separated (ectopic liver) type.

Declarations

Consent for publication

Ethical approval is held to be unnecessary by St. Paul's Hospital Millennium Medical College Institutional Review Board as this is a single rare case encountered during clinical practice.

Availability of Supporting Data

All data and materials are available upon request by the Editor-in-Chief.

Competing Interests

No authors have disclosed any conflicts of interest.

Funding

Not applicable.

Authors' Contributions

All authors contributed in different aspects. EM operated on the patient and also followed the patient. KG and AA wrote the draft of the case presentation. MT operated on the patient, wrote the case report, and is also following the patient. All authors read and approved the final manuscript.

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References

1. Arora V, Gautam A (2018) Accessory lobes of Liver - A rare malformation noticed during autopsy. *Journal of Punjab Academy of Forensic Medicine and Toxicology* 18(1): 69.
2. Schwantes CRM, Miler BL, Gimenes ACO, Ribeiro GNB, Lima SKA, et al. (2021) Anatomical characteristics of the accessory hepatic lobe and its clinical-functional particularities. *International Journal for Innovation Education and Research* 9(5): 211-217.
3. Vasin D, Doklestić K, Stojadinović M, Filipović A, Kovač J, et al. (2019) Accessory and ectopic liver lobe at same patient: Case report. *Sanamed* 14(2): 199.
4. Sirasanagandla SR, Kumar N, Nayak SB, Shetty SD, Bhat KMR (2013) Accessory liver lobe attached to the wall of the gallbladder: A cadaveric case report. *Anat Sci Int* 88(4): 246-248.
5. Adin ME, Çetinçakmak MG, Deniz MA, Göya C (2018) Accessory liver within the thoracic cavity. *Surg Radiol Anat* 40(9): 1085-1091.
6. Ladurner R, Brandacher G, Mark W, Lannetti C, Lottersberger C, et al. (2005) Complete hepatic ischemia due to torsion of a large accessory liver lobe: First case to require transplantation. *Transpl Int* 18(4): 467-469.
7. Nagavalli A, Polanski S, Peterson CM, Birkholz JH, Burdette AS (2021) The liver twist: A case of accessory liver lobe torsion presenting after mild trauma. *Radiol Case Rep* 16(9): 2817-2823.
8. Wang X, Zhang Q, Xu K (2019) Hepatocellular carcinoma arising from left accessory liver lobe supplied by the branch of left hepatic artery: A case report. *Medicine (Baltimore)* 98(40): e16912.