

CASE IMAGE

Left segmental hypoplasia of liver with concomitant gallbladder agenesis

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Abstract**Key Clinical Message**

Congenital liver anomalies are rarely reported. To the best of our knowledge and literature review, associated gallbladder agenesis with left hepatic lobe agenesis is extremely rare. The rarity of this condition and its uncertain radiological features often leads to misdiagnosis and unwarranted surgical treatments.

KEYWORDS

agenesis, gallbladder, hypoplasia, liver, MRCP, segmental

A 52-year-old South East Asian male presented to the surgical Outpatient Department with a complaint of nonspecific colicky abdominal pain and heartburn. He did not have any history of medical or surgical illness. No history of trauma, infections, or carcinoma was present. Family history is unremarkable. On examination, vitals were stable. Systemic examination was normal. Baseline laboratory investigations were found to be within normal limits. The gallbladder was not visualized well on the ultrasound. Contrast-enhanced computed tomography (CECT) abdomen and magnetic resonance cholangiopancreatography (MRCP) was done. CECT showed the absence of III and IVB segments of the left lobe of the liver (**Figure 1**). MRCP revealed the absence of gallbladder with intact common hepatic duct, common bile duct, and pancreatic duct appearing normal in caliber and course (**Figure 2**). An incidental finding of left segmental hypoplasia of the liver with concomitant gallbladder agenesis was made. Furthermore, upper gastrointestinal endoscopy was performed. Diagnosis of gastroesophageal reflux disease (GERD) was established. He was managed conservatively and on the regular follow-up, he is free of symptoms. No any surgical intervention was done.

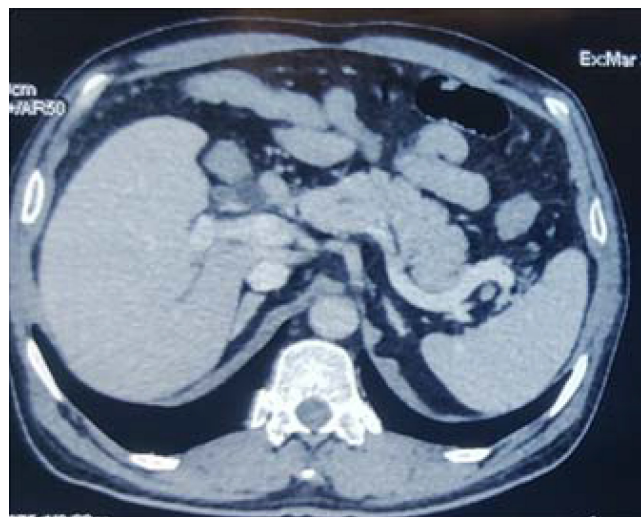


FIGURE 1 Contrast-enhanced computed tomography shows absent segments III and IVB of the left lobe of the liver.

Congenital liver anomalies are rarely reported. Some of these include hypoplasia, deformed or agenesis of hepatic lobes, absent segment, and agenesis of the gallbladder.¹ Agenesis of the hepatic lobe is an incidental finding as the

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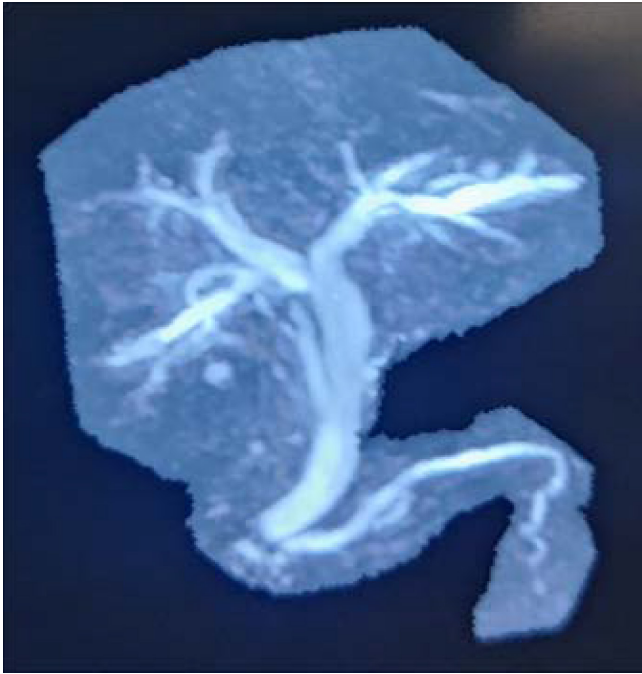


FIGURE 2 MRCP image shows the absence of gallbladder with intact common hepatic duct, common bile duct, and pancreatic duct appearing normal in caliber and course.

patient remains asymptomatic.² Initially, acquired causes of lobar absence like traumatic, vascular, infectious, carcinomatous, or metabolic should be ruled out.³ However, to our knowledge, only associated ectopic gallbladder with left hepatic lobe agenesis is reported.³ To the best of our knowledge and literature review, associated gallbladder agenesis with left hepatic lobe agenesis is extremely rare. The rarity of this condition and its uncertain radiological features often leads to misdiagnosis and unwarranted surgical treatments.

AUTHOR CONTRIBUTIONS

Narendra Pandit: Conceptualization; data curation; investigation; methodology; resources; supervision; validation; writing – original draft; writing – review and editing. **Durga Neupane:** Conceptualization; data curation;

investigation; methodology; resources; supervision; validation; writing – original draft; writing – review and editing.

FUNDING INFORMATION

None.

CONFLICT OF INTEREST STATEMENT

None.

DATA AVAILABILITY STATEMENT

Relevant data are available in the manuscript.

CONSENT

Written informed consent was obtained from the patient for the images.

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REFERENCES

1. Ormeci T, Erdogan ST, Ormeci A, Aygun C. A rare congenital liver anomaly: hypoplasia of left hepatic lobe. *J Pak Med Assoc.* 2016;66(12):1662-1664.
2. Nacif LS, Buscariolli Ydos S, D'Albuquerque LA, Andraus W. Agenesis of the right hepatic lobe. *Case Rep Med.* 2012;2012:415742. doi:10.1155/2012/415742
3. Kanwal R 3rd, Akhtar S. Left hepatic lobe agenesis with ectopic gallbladder. *Cureus.* 2021;13(7):e16131. doi:10.7759/cureus.16131

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