Left segmental hypoplasia of liver with concomitant gallbladder agenesis

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Left segmental hypoplasia of liver with concomitant gallbladder agenesis

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: liver; hypoplasia; segmental; gallbladder; agenesis; MRCP

A 52 year-old South East Asian male presented to the surgical OPD with a complain of non-specific colicky abdominal pain and heartburn. He didn't 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. Gallbladder was not visualized well on the ultrasound. Contrast enhanced CT (CECT) abdomen and MRCP was done. CECT showed absence of III and IVB segments of left lobe of liver (Figure 1). MRCP revealed 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 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 regular follow-up, he is free of symptoms. No any surgical intervention was done.

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 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.⁴ 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.

Consent for publication

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

Ethical approval

Not required

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None

Conflict of interest

None

Data Availability Statement

Relevant data is available on the manuscript.

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Figure 1: Contrast enhanced CT showing absent segments III and IVB of left lobe of liver



Figure 2: MRCP image showing absence of gallbladder with intact common hepatic duct, common bile duct and pancreatic duct appearing normal in caliber and course



