ANOMALOUS GALLBLADDER: ATYPICAL ACUTE CHOLECYSTITIS IN A PATIENT WITH PHOCOMELIA

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INTRODUCTION

Anomalous gallbladder anatomy can pose a challenge to accurately and promptly diagnose acute cholecystitis due to the incongruence between clinical presentation and imaging studies. Such cases require extra caution for diagnosis and operative planning.

CASE PRESENTATION

- 45F w/ PMHx of phocomelia
- 5-day history of nausea, vomiting, severe RUQ & epigastric pain unrelated to PO intake
- CT showing anomalous gallbladder, persistent RUQ pain

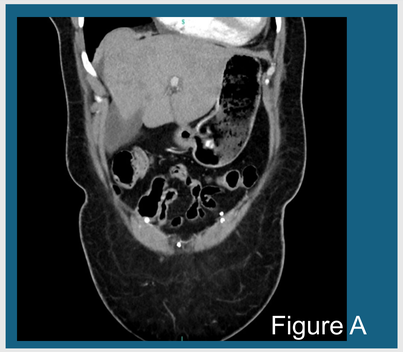
Figure A

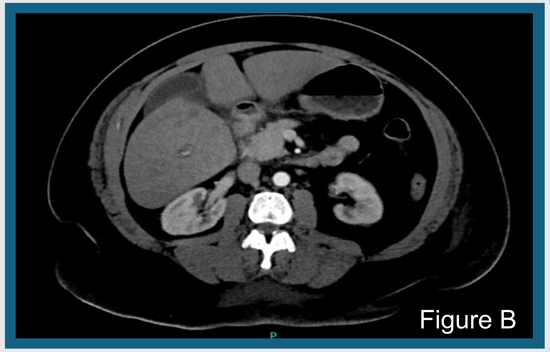
Figure B

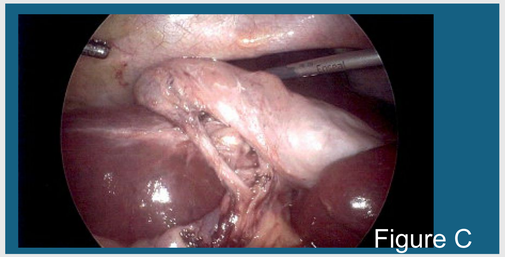
Figure C

Figure A: Fluid-filled structure with a thickened wall on the outside of the liver. Absent gallbladder within the gallbladder fossa
Figure B: Extrahepatic, thickened gallbladder
Figure C: Intraoperative anomalous gallbladder with long cystic duct

DISCUSSION

Phocomelia is a rare congenital disorder where the long bones of limbs are severely shortened or even absent due to vascular disruption during organogenesis. In this, unexpected anomalous gallbladder anatomy in a patient with phocomelia created a diagnostic challenge. Although phocomelia is associated with a wide array of clinical manifestations, aberrant gallbladder anatomy is not notably associated.

In this patient, imaging studies failed to confirm the diagnosis of acute cholecystitis. The decision to proceed with diagnostic laparoscopy proved critical. The gallbladder was visualized on the anterior-superior hepatic surface, and the cystic duct was remarkably long, and significant amounts of edema and inflammatory changes were present. This conflict between clinical presentation and radiographic findings exemplified the challenges of evaluation in patients with phocomelia. Anomalous anatomy, the gallbladder in our case, can obscure the typical radiologic hallmarks of disease, limiting the reliability of otherwise sensitive modalities and delaying recognition and treatment. Therefore, meticulous clinical judgement and a high index of suspicion are essential, especially in patients where usual anatomy may be altered. To our knowledge, this is the first reported case in which diagnostic laparoscopy followed by laparoscopic cholecystectomy was performed successfully in a patient with phocomelia and aberrant gallbladder anatomy. Our case represents the first in which the anomaly was confirmed intraoperatively illustrating that minimally invasive management remains feasible in individuals with known congenital disorders, reiterating that surgeons must maintain vigilance for atypical anatomy and be prepared to adapt their approach when necessary.

CONCLUSION

Aberrant anatomy should be considered as a potential cause of symptoms when patient presentation and imaging do not align. Surgeons need to exercise caution, adapt, and tailor operative techniques to patient's unique anatomy. The combination of phocomelia and anomalous gallbladder anatomy indicates a broader spectrum of anomalies than currently reported in the literature. Timely recognition of these variants is vital for optimizing patient care.