

Gallbladder Ectopia: A Rare Case

Al Bryndon Tade Castillo

Baguio General Hospital and Medical Center Luis Hora Memorial Regional Hospital, Philippines.

Abstract

This is a rare case of an ectopic gallbladder detected via ultrasound and CT scan in a 14-year-old male, who was seen at the Emergency Department due to intermittent right upper abdominal quadrant pain. He underwent laparoscopic cholecystectomy, where an acutely inflamed gallbladder was located antero-superiorly to the liver at the right subdiaphragmatic area and embedded to the abdominal wall. Available literature regarding this entity is very limited. Aberrant locations of the gallbladder are of great clinical significance since the clinical presentation of cholecystitis may be atypical. Misdiagnosis in imaging may affect the course of patient treatment and technical problems during cholecystectomy and other biliary operations may also be encountered.

Keywords: ectopic gallbladder; floating gallbladder

Case Report

Anomalous located gallbladder is a relatively rare condition, and only 0.1-0.7% cases are reported [1,2]. Ectopic gallbladder can be left-sided, transversely positioned, retroperitoneal, or floating, and less commonly, has also been found in the lesser momentum, the retro duodenal area, falciform ligament, within the abdominal wall muscles, and within the thorax [1-4]. In this region alone, there had been no previously reported cases of ectopic gallbladders. The clinical presentation of an abnormally located gall bladder may cause a significant diagnostic dilemma on physical examination as the typical signs of acute cholecystitis can be absent and peritoneal signs may not be seen [1]. Radiologic assessment may also be altered in cases of gallbladder variants [5]. The consequent delays in the diagnosis of gallbladder pathology may be deleterious for the patient.

Discussion

The gallbladder is normally situated beneath the right lobe of the liver along the plane of the interlobar fissure, straddling the undersurface of segments IVB and V. The neck is found within the porta hepatis and may extend to the caudal border of the liver [6,8]. Most commonly, ectopic gallbladders are found (1) under the left liver lobe in patients with or without situs inversus totalis, (2) intrahepatic, (3) transverse, and (4) retro hepatic or retroperitoneal. Isolated cases of ectopic positions of the gallbladder include the

falciform ligament, superior to the right lobe of the liver and under the diaphragm, the abdominal wall, behind the pancreas, or may be intra-thoracic [1-4]. In this case, the gallbladder was located suprahepatically, subdiaphragmatic and adherent to the abdominal wall. Very few literatures have been found describing this variant. Furthermore, a structured review of available related literature from 2010-2016 has revealed that there is limited understanding of the etic-pathogenesis of such condition. The most common presenting symptom of cholecystitis is upper abdominal pain, frequently beginning at the epigastrium then localizing at the RUQ. In some cases, peritoneal irritation may cause a dull colicky pain radiating to the right shoulder or scapula. Nausea, vomiting and fever are generally present.⁹ In this case, the patient presented with constant RUQ pain which was not radiating, pricking in quality and aggravated by movement, not associated with other signs or symptoms. Ectopic positions of the gallbladder alter the clinical presentation of cholecystitis; hence, are of great clinical significance [2]. Aberrant locations of this organ may pose a diagnostic problem as this defect may be considered as a different entity, such as a mass [5]. According to literature available, whenever there is failure to localize the gallbladder in its normal anatomic position on routine imaging, anomalous location of the gallbladder should always be considered. Ultrasonography will help in such cases. Furthermore, angiography may be employed by identifying the cystic artery. Computed Tomography, Magnetic Resonance Imaging, and Endoscopic

Retrograde Cholangiopancreatography may also aid in the preoperative planning of surgery for these patients, but often are often nonspecific. A study conducted on the use of CT scan in detecting gallbladder anomalies indicated that this modality can be helpful in the study of patients with no visualized gallbladders, as in this case [10]. Thus, the radiologist must always inform the clinician about the presence of an ectopic gallbladder [2]. It has been recommended that cholecystectomy should be done for ectopic gall bladder, even in asymptomatic cases [1].

Conclusion

The atypical presentation of cholecystitis due to abnormal gallbladder locations may cause significant dilemma and delay in the diagnosis and management of patients with such condition [7]. Ultrasonography is the primary imaging modality of choice for gallbladder anomalies, with CT and MRI being more helpful in cases where the organ is aberrantly located. A collaborative approach between the clinician and radiologist is of utmost importance to plan appropriate surgical approaches for these patients. A rare case of a 14-year-old male, whose gallbladder was abnormally located, is presented. Laparoscopic cholecystectomy was performed as it has been recommended for ectopic gall bladder, even in asymptomatic cases.

References

1. M. B. Popli, V. Popli, and Y. Solanki. (2010). "Ectopic gall bladder: a rare case," *Saudi Journal of Gastroenterology*, 16(1):50.
2. Rafailidis V, Varelas S, Kotsidis K, Rafailidis D. (2014). "Two congenital anomalies in one: an ectopic gallbladder with phrygian cap deformity." *Case Rep Radiol*, 246476.
3. Ali M, F, Friedel D, Levin G, Two Anomalies in One: A Rare Case of an Intrahepatic Gallbladder with a Cholecystogastric Fistula. *Case Rep Gastroenterol*, 11:148-115.
4. Türkvan, A. Erden, M. Çelik, and T. Ölçer. (2006). "Ectopic hypoplastic and multiseptate gallbladder with coexisting choledochal cyst: evaluation with sonography and magnetic resonance cholangiopancreatography," *Journal of Clinical Ultrasound*, vol. 34(2):88-91.
5. Naganuma S, Ishida H, Konno K, Hamashima Y, Hoshino T, Naganuma H, Komatsuda T, Ohyama Y, Yamada N, Ishida J, Masamune O. (1998). "Sonographic findings of anomalous position of the gallbladder", *Abdom Imaging*, 23(1):67-72.
6. Meilstrup J, Hopper K, Thieme G. (1991). "Imaging of Gallbladder Variants", *American Journal of Roentology*, 157:1205-1208.
7. Reza S, Nasreen F, Quddus S, Mandal T, Hussain F. (2014). "Ectopic gallbladder: An interesting case report", *Bangladesh J. Nucl. Med.* 17(2):156-158.
8. Havrilla T, Reich N., Haaga J, Seidelmann F, Cooperman A, Alfidi R. (1978). "Computed tomography of the Gallbladder", *Am J Roentgenof*, 130:1059-1067.

Cite this article: Al Bryndon T. C. (2023). Gallbladder Ectopia: A Rare Case. *Journal of Surgical Case Reports and Reviews*. BRS Publishers. 2(2); DOI: 10.59657/2993-1126.brs.23.015

Copyright: © 2023 Al Bryndon Tade Castillo, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Article History: Received: July 11, 2023 | Accepted: July 28, 2022 | Published: July 31, 2023