

Yemen Journal of Medicine





Article information

DOI: 10.63475/yjm.v4i1.0027

Article history: Received: 04 April 2025 Accepted: 06 May 2025 Published: 28 May 2025

Correspondence to: Rabti Souphia Email: rabti.souphia@gmail.com ORCID: 0009-0000-5010-2791

How to cite this article

Souphia R, Basma BH, Saoussen BM, Hager EB, Wael F, Bechir KM. Hydatid Cholecystitis: A Rare and Unexpected Diagnosis Mimicking Acute Cholecystitis. Yemen J Med. 2025;4(1):191-192

Copyright License: © 2025 authors. This scholarly article is disseminated in accordance with the provisions of the Creative Commons Attribution License, thereby permitting unrestricted utilization, distribution, or reproduction across any medium, provided that credit is given to the authors and the journal

Letter to the Editor

Hydatid Cholecystitis: A Rare and Unexpected **Diagnosis Mimicking Acute Cholecystitis**

Rabti Souphia^{1,2,4}, Ben Hassine Basma^{1,3,4}, Ben Marzouk Saoussen^{1,2,5}, El Bahi Hager^{1,2,6}, Farjaoui Wael^{1,2,6}, Khalifa Mohamed Bechir^{1,2,7}

1 General Surgery Department, Military Hospital of Tunis, Mont Fleury-1008, Tunis, Tunisia

2 Faculty of Medicine of Tunis, 15, Djebel Lakhdhar Street - 1007 Bab Saadoun, Tunis, Tunisia

3 Faculty of Medicine Ibn El Jazzar of Sousse, Sousse, Tunisia

- 4 Doctor of Medicine
- 5 Assistant professor in General Surgery
- 6 Associate Professor of General Surgery
- 7 Professor of General Surgery

To the editor,

Hydatidosis is a parasitic zoonosis caused by the larval form of Echinococcus granulosus, endemic in the Mediterranean basin, the Middle East, and South America. [1] While this pathology primarily affects the liver (50-70%) and lungs (20-30%), [2] vesicular localization is exceptionally rare, representing merely 0.1% of all hydatid localizations. [3] This rarity significantly complicates preoperative diagnosis, often leading to intraoperative discovery.

We report the case of a 39-year-old male patient with a history of hepatic hydatid cyst (type IV, segment VII) treated surgically in 2019 by resection of the protruding dome. The patient presented two and a half years later with right hypochondrial pain and fever. Clinical examination revealed an anicteric patient with right hypochondrium tenderness and fever.

Laboratory tests showed an inflammatory syndrome without cholestasis or cytolysis. Abdominal ultrasonography suggested acute cholecystitis with no biliary dilatation or hydatid recurrence. During subcostal surgery, we found a distended gallbladder with a thickened wall and intense pediculitis. Upon intraoperative exploration of the gallbladder, clear fluid and a hydatid membrane were discovered (Figure 1). We performed a cholecystectomy with transcystic drainage. Pathological examination confirmed acute ulcerated cholecystitis, while parasitological analysis identified a scolex. Post-operative cholangiography revealed no abnormalities, allowing drain clamping and patient discharge.

Several pathogenic hypotheses have been proposed for this unusual localization. According to Rigas et al., vesicular involvement could result either from direct hematogenous contamination or extension from an adjacent hepatic hydatid cyst. [4] The clinical presentation typically mimics classic acute cholecystitis, [5] making preoperative diagnosis challenging. Conventional imaging can be misleading, as in our case, where ultrasonography suggested lithiasis etiology. [6]



Figure 1: Intraoperative image showing hydatid membrane within the gallbladder

In endemic regions, particularly with patients having a history of hydatidosis, this rare etiology should be systematically considered. MRI can sometimes be more diagnostic, showing characteristic images of floating membranes or daughter vesicles. [7]

Treatment primarily involves total cholecystectomy. Yücesoy et al. recommend a cautious surgical approach to avoid intraoperative dissemination. [8,9] The use of intraoperative scolicidal agents remains controversial. Due to recurrence risks, prolonged post-operative follow-up is advisable.

This case follows the SCARE guidelines [10] and has received patient consent for publication. The hydatid cyst of the gallbladder represents an exceptional localization of hydatidosis, whose preoperative diagnosis remains difficult despite advances in imaging. Our observation underlines the importance of considering this rare etiology in endemic areas, particularly in patients with a history of hydatidosis.

PATIENT CONSENT

A written informed consent was obtained from the patient for publication of this case report.

AUTHORS' CONTRIBUTION

All authors contributed to the completion of this work. The final manuscript was read and approved by all authors.

SOURCE OF FUNDING

None.

CONFLICT OF INTEREST

None.

REFERENCES

- Eckert J, Deplazes P. Biological, epidemiological, and clinical aspects of echinococcosis. Clin Microbiol Rev. 2004;17(1):107-35.
- Ohkouchi S, Ebina M, Kamei K, Moriyama H, Tamai T, Shibuya R, et al. Fatal acute interstitial pneumonia in a worker making chips from wooden debris generated by the Great East Japan earthquake and tsunami. Respir Investig. 2012;50(4):129-34.
- Safioleas M, Stamoulis I, Theocharis S, Moulakakis K, Makris S, Kostakis A. Primary hydatid disease of the gallbladder: a rare clinical entity. J Hepatobiliary Pancreat Surg. 2004;11(5):352-6.
- Rigas AM, Karatzas GM, Markidis NC, Bonikos DS, Sotiropoulou GG, Skalkeas G. Primary hydatid cyst of the gallbladder. Br J Surg. 1979;66(6):406.
- Safioleas M, Misiakos E, Manti C. Surgical treatment for splenic hydatidosis. World J Surg. 1997;21(4):374-7.
- Lewall DB, McCorkell SJ. Rupture of echinococcal cysts: diagnosis, classification, and clinical implications. AJR Am J Roentgenol. 1986;146(2):391-4.
- Pedrosa I, Saíz A, Arrazola J, Ferreirós J, Pedrosa CS. Hydatid disease: radiologic and pathologic features and complications. Radiographics. 2000;20(3):795-817.
- Yücesoy AN, Poçan S. Secondary gallbladder hydatidosis and nonfragmented germinative membrane sourced acute cholecystitis: a case report. World J Gastroenterol. 2008;14(12):1960-3.
- Krasniqi A, Limani D, Gashi-Luci L, Spahija G, Dreshaj IA. Primary hydatid cyst of the gallbladder: a case report. J Med Case Rep. 2010 Jan 29;4:29
- Sohrabi C, Mathew G, Maria N, Kerwan A, Franchi T, Agha RA; Collaborators. The SCARE 2023 guideline: updating consensus Surgical CAse REport (SCARE) guidelines. Int J Surg. 2023;109(5):1136