

Clinical Image

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Simultaneous intrathoracic and intrabiliary rupture of hepatic hydatid cysts

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Description

Hydatidosis is a parasitic disease caused by *Echinococcus granulosus*, a zoonotic cestode that is worldwide distribution, but especially endemic in some areas such as the Mediterranean region. It is caused by accidental ingestion of *E. granulosus* eggs, leading to cyst formation in organs, primarily the liver (50-70%), but also in the lungs, spleen, kidneys, and brain [1].

Ultrasonography (USG) is the preferred screening method for hepatic hydatid cysts (HHC) and is also used to verify the efficiency of treatment. Computed Tomography (CT) exhibits high sensitivity and specificity in the diagnosis of hydatid disease. It plays a crucial role in detecting calcifications in the cyst wall, evaluating complications, illustrating bone lesions, and is highly recommended to search for extra hepatic localizations. Magnetic Resonance Imaging (MRI) excels in displaying biliary connections [2]. HHC is often asymptomatic, but larger cysts may cause abdominal pain, or complications: compression (of the biliary tract resulting in jaundice, portal vein resulting in portal hypertension, or inferior vena cava resulting in Budd

Chiari syndrome), rupture (intra biliary, intra thoracic or peritoneal), super infection and hemorrhage [3]. Morbidity is usually secondary to the cyst's free peritoneal rupture with or without anaphylaxis [1].

A 63-year-old man from a rural area of Morocco, recently diagnosed with HHC, presented for thoracic CT to examine potential cyst spread. He had a productive cough. CT imaging revealed emphysematous lungs and a thick-walled cystic formation in the right paracardial area, surrounded by ground-glass opacity, and communicating with a calcified liver dome cyst through a diaphragmatic defect. The adjacent bronchus were thickened but no intrabronchial material was seen. Abdominal slices showed another cyst in the segment V, containing air, with signs of biliary rupture and aerobilia. MRI confirmed communication with the gallbladder and a duodenal fistula, explaining the air presence in bile ducts.

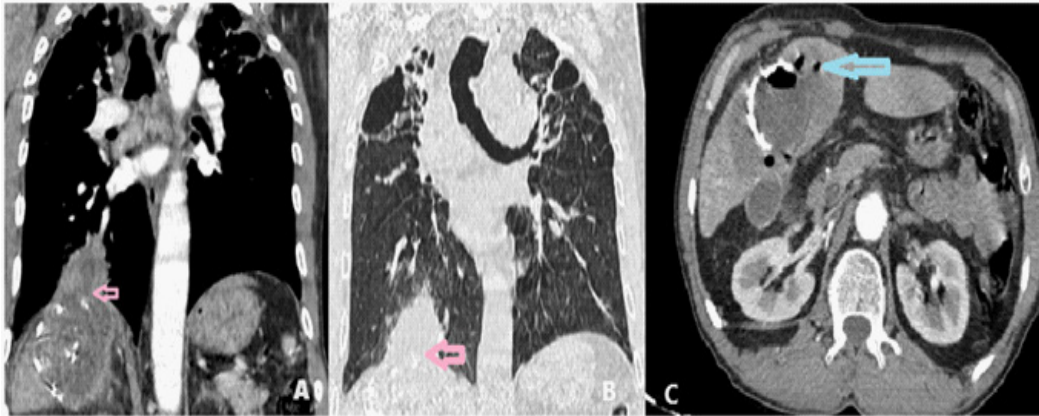


Figure 1: (A) CT scan showing intrathoracic and intrabiliary rupture: rupture of the dome cystic lesion into right inferior pulmonary lobe through diaphragmatic defect. (B) Parenchymal window showing the ground glass opacity surrounding the thoracic lesion. (C) Aerobilia and intracystic air showing communication of hydatid cyst with biliary ducts and digestive structures.

Declarations

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Consent: written consent was obtained from the patient for anonymous use of his data.

References

1. T. Gessese. Review on Epidemiology and Public Health Significance of Hydatidosis. Vet Med Int. vol. 2020; 2020. doi: 10.1155/2020/8859116.
2. Pooja Mehta, Niranjana Khandelwal, and Mahesh Prakash. Radiological manifestations of hydatid disease and its complications. Trop Parasitol. 2016. doi: 10.4103/2229-5070.190812.
3. E. Ferrer-Inaebnit, F. X. Molina-Romero, J. J. Segura-Sampedro, X. González-Argenté, and J. M. Morón-Canis. A review of the diagnosis and management of liver hydatid cyst. Revista Española de Enfermedades Digestivas. 2022; 114(1): 35–41. doi: 10.17235/reed.2021.7896/2021.