Hydatid Cyst of the Liver Ruptured into the Thorax in a Child

Zouari M¹²*, Abdallah AKB¹², Abid I¹², Dhaou MB¹² and Mhiri R¹²

¹Department of Pediatric Surgery, Hedi-Chaker Hospital 3029 Sfax, Tunisia
²Sfax Medical School, Sfax, Tunisia

Received: 02 Apr 2019
Accepted: 23 Apr 2019
Published: 29 Apr 2019

*Corresponding to:
Mohamed Zouari, Department of Pediatric Surgery.
Hedi Chaker Hospital.
3029 Sfax, Tunisia, Tel: +21697459586, E-mail: mohamed.zouari@rns.tn

1. Clinical Image

Hydatid disease (HD) is an important medical, social, and economic problem in many Mediterranean and Middle East countries [1]. Hydatid disease affects most commonly the liver and lungs [2]. One of the serious complications of liver hydatid cysts is cyst rupture. The rupture can occur after a trauma, or spontaneously because of increased intracystic pressure [3]. The surgical management of cyst rupture is difficult, and often associated with high morbidity and mortality rates [3, 4]. To the best of our knowledge, this is the first report of a hydatid cyst of the liver ruptured into the thorax in a child. Written informed consent was obtained from the legal guardian of the patient to publish this case and accompanying images in scientific journals for research and educational purposes.

In February 2018, A 6-year-old boy who fell to the ground from a two meters high wall presented to the emergency department (Hedi Chaker Hospital, Sfax, Tunisia) for complaints of dyspnea, cough, and abdominal pain of around 10 hours duration. The patient lived in a rural area with exposure to animals. His medical history revealed no known comorbidities. On examination, his temperature was 38.2°C. The respiratory rate was 44 breaths/min, heart rate 102 beats/min, arterial blood pressure 90/60 mm Hg, and SpO₂ 90%. Abdominal examination revealed tenderness and ecchymosis on the right abdomen. In the computed tomography (CT) evaluation, the liver had multiple low-density lesions in segments V, VI, VII, and VIII (4.5-cm, 4-cm, 3-cm, and 5-cm diameter, respectively). The hydatid cyst of the hepatic dome was complicated by pulmonary cracking with evidence of a fistulous pathway (Figure 1). There was also a right-sided pleural effusion. The patient underwent emergency surgery after 90 min from the diagnosis. After insertion of a chest tube in the fifth right intercostal space, a right subcostal lararotomy was performed. The ruptured hepatic cyst (Figure 2) was treated by cystectomy, excision of the germinative membrane, and closure of the fistulous tract with non-absorbable suture. Then the excision of the other hydatid cysts was performed. After operation, oral albendazole treatment (10 mg/kg) for 6 months was suggested as medical adjuvant treatment.

Figure 1: The thoracoabdominal tomodensitometry with coronary reconstruction shows a hydatid cyst of the hepatic dome (A; black arrow) complicated by pulmonary cracking with evidence of a fistulous pathway (B; white arrow).

©2019 Zouari M. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.
References


Figure 2: Laparotomy revealed a hydatid cyst of the hepatic dome (arrow) with inflammatory adhesions between the cyst and the diaphragm.