Clinical Image

HydatidCyst of the Liver Ruptured into the Thorax in a Child

Zouari M[1, 2*], Abdallah AKB[1, 2],Abid I[1, 2],Dhaou MB[1, 2] and Mhiri R[1, 2]

[1]Department of Pediatric Surgery, Hedi-Chaker Hospital 3029 Sfax, Tunisia

[2]Sfax 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 (HediChaker 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.

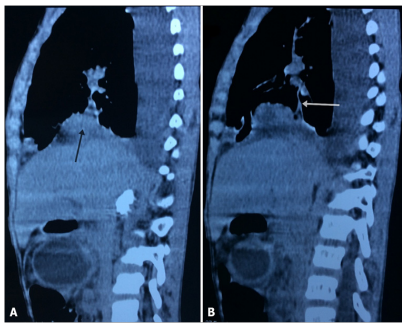

Figure 1: The thoracoabdominaltomodensitometry with coronary reconstruction shows a hydatid cyst of the hepatic dome (A; black arrow) complicated by pulmonary cracking with evidence of a fistulous pathway (B; white arrow).

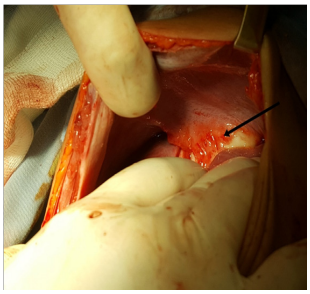

Figure 2: Laparotomy revealed a hydatid cyst of the hepatic dome (arrow) with inflammatory adhesions between the cyst and the diaphragm.

References

1. Santivanez S, Garcia HH. Pulmonary Cystic Echinococcosis CurrOpinPulm Med. DOI: 10.1097/MCP.0b013e3283386282. 2010; 16(3): 257 - 61.

2. Belli S, Akbulut S, Erbay G, Koçer NE. Spontaneous Giant Splenic Hydatid Cyst rupture causing fatal anaphylacticshock: a case report and briefliteraturereview. Turk J Gastroenterol. DOI: 10.5152/tjg.2014.3521. 2014; 25(1): 88 - 91.

3. Rabiou S, Lakranbi M, Ouadnouni Y, Panaro F, Smahi M. Surgical management of hydatidBilio-bronchial fistula by exclusive thoracotomy. Int J Surg. doi: 10.1016/j.ijsu.2017.03.074. 2017; 41: 112-8.

4. Toumi O, Noomen F, Salem R, Rabeh H, Jabra SB, Korbi I et al. Intraperitoneal rupture of hydatidcysts. Eur J Trauma EmergSurg. doi: 10.1007/s00068-016-0662-9. 2017; 43(3): 387 - 91.