Open Science Journal of Clinical Medicine
2015; 3(4): 117-119
Published online May 30, 2015 (http://www.openscienceonline.com/journal/osjcm)

Hydatic Cyst of Diaphragm Two Cases Report

Mountassir Moujahid[1], Belasri Salah[2], Mohamed Rhari[2], Amine EL Mokadem[3], Moulay Hassan Tahiri[1]

[1]Departement of Surgery, University of Medicine and Pharmacy of Rabat, 5th Military Hospital, Guelmim, Morocco
[2]Departement of Radiology, University of Medicine and Pharmacy of Rabat, 5th Military Hospital, Guelmim, Morocco
[3]Departement of Anesthesia Resuscitation, University of Medicine and Pharmacy of Rabat, 5th Military Hospital, Guelmim, Morocco

Email address

m.moujahid@gmx.fr (M. Moujahid)

To cite this article

Mountassir Moujahid, Belasri Salah, Mohamed Rhari, Amine EL Mokadem, Moulay Hassan Tahiri. Hydatic Cyst of Diaphragm Two Cases Report. *Open Science Journal of Clinical Medicine.* Vol. 3, No. 4, 2015, pp. 117-119.

Abstract

The hydatic cyst of the diaphragm is a rare affection. The clinical signs are absentees or atypical. The medical imaging shows the hydatic nature of the cyst but rarely specifies its diaphragmatic localization. On the therapeutic plan, the abdominal way allows handling the cyst as well as with other associated pathologies. The thoracic way is reserved for cysts with purely thoracic development or those opened in the pleura or the bronchi. The partial pericystectomy gives excellent results.

Keywords

Cystic Hydatid, Diaphragm, Pericystectomy

1. Introduction

The muscular localizations of the hydatic disease are rare and the diaphragmatic infringement is exceptional. We report two cases brought together in the service of general surgery at the 5th military hospital in Guelmim. The relative rarity of this localization and the difficulties of its diagnosis make the interest of this study.

1.1. Observation 1

13-year-old child without notable pathological histories admitted in the service for a basi thoracic pain associated with a dyspnoea and a cough evolving for three months in an apyretic context, no notion of asthenia or loss of weight the whole evolving in a context of preservation of the general state.

The abdominal echograph showed an aspect in favor of a hepatic hydatid cyst. He was operated by right under costal. The exploration per operating was in favor of an isolated cyst of the right diaphragm (Figure 1). A simple pericystectomy was realized with a good clinical and radiological evolution. The child left the service in the fifth day.The follow up of five years no sign of second recurrence.

1.2. Observation 2

65-year-old woman admitted in the service for a pain of the right hypochondria evolving for one year, the abdominal echograph objectified a pure liquid image of 8cm of diameter in the contact of the segment VIII of the liver.

The abdominal scanner raised the diagnosis by showing a hydatid cyst localized in the right diaphragm in the frontal and axial cup (Figure 2, 3).

She was operated by a right under costal allowing realizing a partial pericystectomy.

The follow up were simple and the patient left the service one week after.

No sign of second recurrence on a backward movement of 3 years.

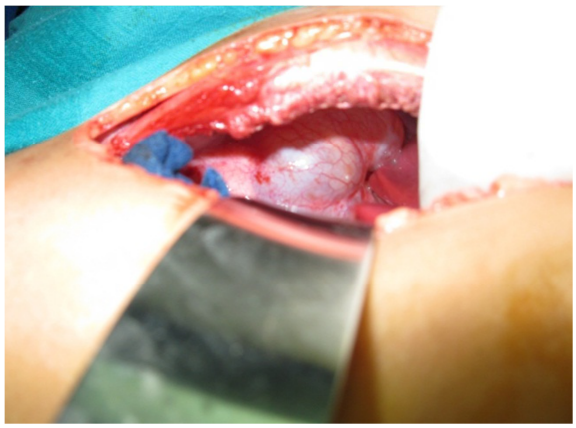

Figure 1. *Per operating view in favor of an isolated hydatid cyst of the right diaphragm.*

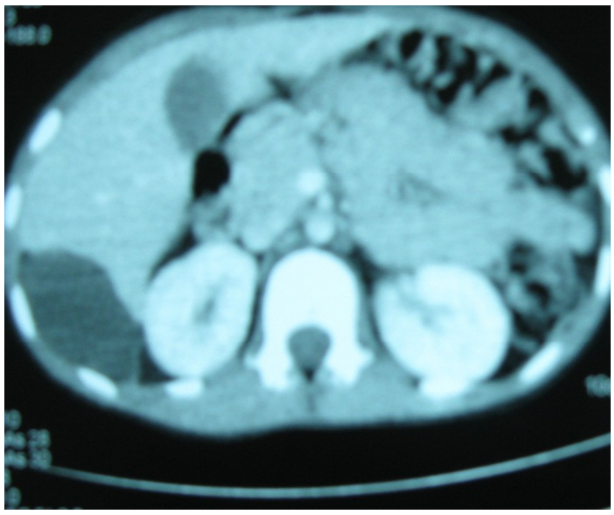

Figure 2. *Axial cup showing a hydatid cyst localized in the right diaphragm.*

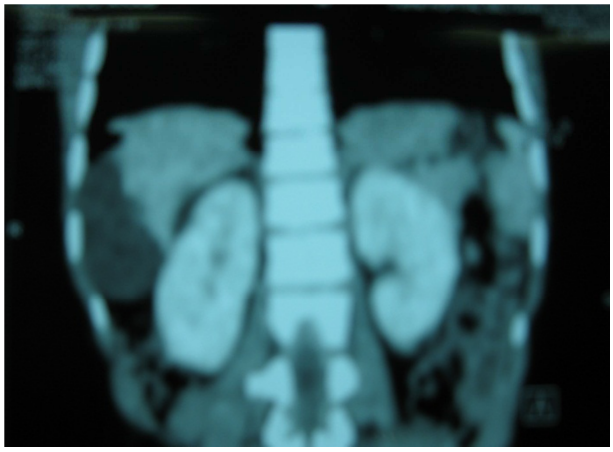

Figure 3. *Abdominal scan in the frontal cup showing a hydatid cyst localized in the right diaphragm.*

2. Discussion

The very low frequency of the systematic localizations of the hydatic disease is essentially understandable by the fact that the embryonic hexacanthe having crossed the intestinal barrier has to cross by two important filters that are the liver and the lungs. For the muscular localizations, certain authors move forward the hypothesis of a difficulty for the embryo to become established in a muscle because of the muscular contractions and the presence of lactic acid hampering its development (1). The circulatory theory reports these only primitive localizations or associated with other visceral localizations realizing the multiple and parallel primitive shape. The hypothesis of an infestation by lymphatic ways existing between the liver or the lungs and the diaphragm was raised (2).

The secondary forms are due to a sowing by peritoneal way from a hepatic cyst generally and enter within the framework of the peritoneal ecchinococcosis.

Clinically, the hydatic cyst of the diaphragm can be asymptomatic and of fortuitous discovery. In the multi visceral localizations, the diaphragmatic cyst can be discovered during a balance assessment of extension of the hydatic disease (3,4). Or remain underestimated until the intervention. The diaphragmatic localization can be revealed by a complication such as the break in the pleural cavity or a fistula in bronchi. Generally, the clinical picture does not differ from that observed during diaphragmatic tumors realizing a not specific thoracic and abdominal symptom of the irritate type, characterized by thoracic pain or of the right hypochondria irradiated or not in the shoulder. This pain increase in the inspiration and in the cough with a variable dyspnoea. We can observe symptoms of esophagi gastric compression or the vena cava inferior (3,5).

In the imaging, the lung radiography usually shows a basal opacity, a deformation of the diaphragmatic dome or an effusion localized in the pleural .This does not allow either to specify the seat or to identify the process unless it is calcified (1). The echograph allows in the majority of the cases to assert the hydatic nature of the mass but is not always successful to connect it exactly with the diaphragm. This is the way the cyst is described in position inter hepatica diaphragmatic or of hepatic seat (1,6).

The scanner allows to specify the seat of the cyst, to visualize the development intra thoracic, to detect second recurrences, reports and adhesions between the cyst and the liver generally reporting these difficulties diagnostic (1,4,7)

The MRI with frontal cups allows to explore exactly the abdominal and thoracic borders(1,5,6,8).

The serology except the certain diagnostic interest, the serology allows a follow-up operating comment and the detection of a possible second recurrence.

The treatment of the diaphragmatic hydatid cyst contains as for the other abdominal visceral localizations two sectors (9,10):

- The treatment of the parasite by extraction of the membrane and a possible vesicles girls after draining aspiration of the liquid hydatic and sterilization in the hydrogen peroxide or in the hypertonic salty serum;
- The treatment of the residual cavity by the resection with minima of the pericyst (resection of the striking dome) to avoid any burglary diaphragmatic source of pleural contamination and of diaphragmatic eventration. The total resection of the pericyst with suture of the diaphragm is another alternative.

The way at first is function of the development of the cyst towards the thorax or the belly and the existence of possible complications or of the other associated localizations. As a general rule the abdominal way is sufficient to approach these cysts (2,5,10). A double thoracic and abdominal way is necessary to handle the cyst opened in the pleura.

Whatever is the used technique, the morbidity and the mortality are practically nil (5,6). The diaphragmatic hydatic localization does not seem to have a particular gravity. This can be connected to an accidental sowing per operating or in the obstinacy of vesicles girls in one or several gone unnoticed logettes. The total pericystectomy have a high advantage from RDS.

3. Conclusion

Diaphragmatic hydatic cyst localisation is a rare eventuality and a delicate diagnosis when it is primitive and isolated. The imaging allow in most part of the cases to assert the hydatic nature of the cyst. If they not specify rarely the diaphragmatic seat, they give however invaluable indications onto the development of the cyst in intra thoracic or abdominal and guide the choice of the way at first. On the therapeutic plan, the course to follow towards the cyst must be eclectic as is recommending in the hepatic cysts. It is necessary to resect all the peri cyst when it appears well and to prefer a more or less partial peicystectomy when exist a risk.

References

[1] Essadki O., Elhajjam M., Kadiri R. Kystes hydatiques des parties molles. Aspects radiologiques Ann Radiol 1996 ; 39 : 135-144

[2] Daali M., Bennani R., Hajji A. Le kyste hydatique du muscle psoas. À propos de trois cas Lyon Chir 1997 ; 93 : 113-115

[3] Devega D.S., Vasquez E., Tamames S. Kyste hydatique du diaphragme. À propos d'un cas J Chir (Paris) 1991 ; 128 : 76-78

[4] Guedj P., Atsamena M., Lagoutine V. Kyste hydatique primitif du diaphragme ouvert dans les voies bronchiques. Ann Chir Thorac Cardiovasc 1973; 12 : 175-179

[5] Makni A, Fetirich.F, Jouini.M, Kacem.M, Ben Safta.Z . Kyste hydatique primitif et isolé du diaphragme en Tunisie. Bulletin de la Société de pathologie exotique, 2012, 105, 4, 262-264

[6] Yaman İ, Derıcı H, Kara C. Primary giant hydatid cyst of the diaphragm..Turk J Gastroenterol. 2011 ,22(5):564-5

[7] Di Carlo I, Toro A, Sparatore F, Malfa P. Isolated hydatid cyst of the diaphragm without liver or lung involvement: a case report. . Acta Chir Belg. 2006 Sep-Oct;106(5):599-601

[8] Isik AF, Sagay S, Ciftci A .Diaphragmatic hydatid disease. Acta Chir Belg. 2006 ,106(1):96-7.

[9] Eren S, Ulku R, Tanrikulu AC, Eren MN. Primary giant hydatid cyst of the diaphragm. Ann Thorac Cardiovasc Surg. 2004 ;10(2):118-9.

[10] Kabiri H, Al Aziz S, El Maslout A, Benosman A. Diaphragmatic hydatidosis: Report of a series of 27 cases. Rev Pneumol Clin. 2001 Feb;57(1 Pt 1):13-9.