Case Report

DOI: https://dx.doi.org/10.18203/2320-6012.ijrms20223658

Giant splenic cysts discovered incidentally after early abortion

El bouazizi Yassine*, Aboulfeth El mehdi, Lamghari Mohammed, Hablaje Hind, Moujahid Mountassir, El kaoui Hakim, Najih Mohamed, Bouchentouf Sidi-mohammed, Bounaim Ahmed

Department of Visceral Surgery I, Mohamed V Military Hospital Rabat, Faculty of Medicine and Pharmacy Rabat, Morocco

Received: 26 October 2022 **Revised:** 29 November 2022 **Accepted:** 03 December 2022

*Correspondence:

Dr. El bouazizi Yassine,

E-mail: elbouazizi.yassine@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Splenic cysts are rare tumors, grouped into parasitic and non-parasitic cysts, no-parasitic cysts are further classified into primary and secondary cysts depending on the mucous membrane of the cyst, radiological imaging allows the diagnosis to be made but confirmation of the diagnosis is based on an atom-o-pathological examination of the part. surgical treatment is the cornerstone of symptomatic and complicated splenic cysts. The conservative treatment is a reference for splenic cysts. We report the case of a young woman who was presented with a simple cyst of the spleen.

Keywords: Splenic cysts, Non-parasitic cysts, Early abortion, Partial splenectomy

INTRODUCTION

Splenic cysts are a rare entity, we distinguish pseudocysts, which generally represent the evolution of a traumatic splenic lesion or a splenic infarction, and true cysts which can be congenital (epidermoid cyst), and others are acquired of infectious (hydatid cyst and abscess) or tumoral (lymphangioma, angioma) origin. Often unrecognized from fortuitous discovery during an abdominal imaging examination for another pathology, namely ultrasound, CT, or MRI. The management of these lesions depends on the etiology, surgery, generally conservative, is indicated in large symptomatic cysts.

We report the case of a young woman who presented with a simple cyst of the spleen.

CASE REPORT

This is a 23-year-old patient, married, with a history of early abortion at 10 WA, the consequences of her treatment of which were fortuitously discovered an

abdominal mass leading to her admission to the department of visceral surgery 1 of the Rabat Military Hospital. On examination the patient was in good general condition, TA 120/70 mmHg Fc: 62 bpm, saturation: 98%, abdominal examination found an abdominal mass interesting left hypochondrium, epigastrium to the left flank, and without HTP sign.

An ultrasound showed an intra-abdominal mass in intimate contact with the spleen; well limited regular and coarsely rounded and extends in depth driving back the left kidney in the bottom and outside which remains respected, this mass was not very vascularized with the Doppler containing a posterior reinforcement and contained a small calcification in its center.

A complimentary scan was carried out, which had objectified a voluminous cystic process with a thin wall, polylobed, with liquid content, without septum and vegetative lesion at its level, and without parietal calcification, occupying almost the entire spleen, measuring 183 mm x 137 mm of transverse diameters,

extended over a height of 225 mm not enhanced with the product of contrast (Figure 1-2). The adjacent structures were pushed back and the left diaphragm was raised.

As for the biological assessment, it was unremarkable.

A celioscopic approach was performed, the patient had benefited from a fenestration of a cyst with an aspiration of 4 l of citrine yellow liquid, and resection of a protruding dome whose anatomopathological study was in favor of a benign cyst (Figure 3-4).

The patient was seen in consultation after 3 weeks, with a supple abdomen.



Figure 1: Giant splenic cyst.



Figure 2: Giant splenic cyst



Figure 3: Intraoperative image of a cyst of the spleen.



Figure 4: Intraoperative image of the resection of the dome of the cyst.

DISCUSSION

The diagnosis is difficult, therefore, the different diagnoses are evoked according to the macroscopic and ultrasound aspect.² Fluid damage and tissue damage are described.

Fluid lesions are represented by true cysts, which represent the most frequent lesions of cysts of the spleen, of congenital origin, including the inclusion of ectodermal, mesodermal, or endodermal tissue in the spleen or the involution of mesothelial tissue when fetal life is responsible for the cyst, they are covered by a wall coated with epidermoid or mesothelial epithelium.^{3,4}

Often discovered by chance in young people, or following a painful syndrome of the left hypochondrium, the echographic aspect corresponds to a well-defined, regular image, with homogeneous liquid content with posterior reinforcement. On CT it is a well-limited rounded lesion with a regular outline, hypodense, and with thin walls which do not enhance after injection of contrast product. Their sizes vary from 1 cm to 25 cm, macroscopically the wall of the cyst is whitish and smooth, containing clear or thick contents, on the pathological study the epithelium is stratified squamous or lined by a layer of mesothelial cuboid cells.

In addition, pseudocysts of the spleen are characterized by the absence of cell lining, discovered fortuitously the following imaging, they represent the majority of non-parasitic splenic cysts in young people, they are the result of splenic trauma or splenic infarction following liquefaction of a hematoma followed by resorption of the hematic pigmentation. Macroscopically, it is difficult to differentiate a true cyst from a pseudocyst, only the absence of a cell wall on pathological examination allows the diagnosis of a pseudocyst. The wall is represented by fibrous tissue, possibly calcified. Imaging is similar to that of true cysts with no enhancement of the wall after injection. It is important to look for a notion of trauma in front of the splenic pseudocyst.

In addition, the hydatid cyst of the spleen represents 60 to 75% of all splenic cysts, the doubt in our patient remained until intraoperatively, which motivated us to carry out puncture-aspiration-injection and laparoscopic reaspiration before aspirating the contents. It is only the absence of the proliferous membrane after the opening of the cyst which caused the hydatid cyst to be eliminated. the diagnosis is made on epidemiological and clinical arguments, it is described radiologically in five types ranging from the liquid cyst, with thin walls, to a heterogeneous calcified lesion visible on the images of the abdomen without preparation, ultrasound is the examination of choice for screening.⁶

The main complication of giant spleen cysts is rupture leading to peritonitis.

The management of real cysts or pseudocysts, the management is simple, based on therapeutic abstention for small cysts with a diameter less than 5 cm and asymptomatic, on the other hand, for cysts whose diameter is greater than 5 cm or symptomatic their treatment is surgical while being based on conservative surgery, namely fenestration associated with cystectomy and partial splenectomy.^{8,9}

Also splenectomy can be discussed if the cyst is greater than 5 cm and symptomatic. 10

CONCLUSION

Spleen cysts are rare and of varied etiology, the diagnosis of which is based on clinical and morphological examinations. The treatment is adapted according to the nature of the cyst while opting for a conservative surgery of the spleen.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

REFERENCES

- Pathologie de la rate. Feuillets de Radiologie. 2009;49:323-30.
- 2. Kuwabara S, Hohjoh H, Nakano M, Ebihara Y, Toyama K. Mesothelial Splenic Cyst. Internal Medicine. 1993;32:672-4.
- 3. Morgenstern L. Nonparasitic splenic cysts: pathogenesis, classification, and treatment. J Am Coll Surg. 2002;194:306-14.
- González AE, Elosua González A, Nantes Castillejo O, Tarifa Castilla A, Llanos Chávarri MC. Quiste mesotelial primario esplénico como causa infrecuente de dispepsia: a propósito de un caso. Revista de Gastroenterología de México. 2018;83:463-5.
- Vijayaraghavan R, Chandrashekar R, Aithal S, Rashmi MV, Belagavi CS. Mesothelial cyst of the spleen in an adult: a case report. BMJ Case Rep. 2010; 2010.
- Alkofer B, Lepennec V, Chiche L. Kystes et tumeurs spléniques: diagnostic et prise en charge. J Chir. 2005;142:6-13.
- 7. Wilkins BS, Wright DH. The illustrated pathology of the spleen. Cambridge University Press, Cambridge, UK, 2000. Hematol Oncol. 2000;18:75.
- 8. Sardi A, Ojeda HF, King D. Laparoscopic resection of a benign true cyst of the spleen with the harmonic scalpel producing high levels of CA 19-9 and carcinoembryonic antigen. Am. Surg. 1998;64:1149-54.
- Moir C, Guttman F, Jequier S, Sonnino R, Youssef S. Splenic cysts: aspiration, sclerosis, or resection. J Pediatr Surg. 1989;24:646-8.
- 10. Rachman BM, Matulatan F, Hariastawa IA. Giant mesothelial cyst of the spleen. Journal of Pediatric Surgery Case Reports. 2022;77:102158.

Cite this article as: Yassine E, El mehdi A, Mohammed L, Hind H, Mountassir M, Hakim E, et al. Giant splenic cysts discovered incidentally after early abortion. Int J Res Med Sci 2023;11:338-40.