

Bowel Occlusion Secondary to Retrovesical Hydatid Cyst: Exceptional Complication for Atypical Localization: A Case Report

A. Elhjouji*, S. Bellasri, H. Baba

Department of Surgery, Military Hospital, Guelmim 81000, Morocco

DOI: [10.36347/SJMCR.2019.v07i09.007](https://doi.org/10.36347/SJMCR.2019.v07i09.007)

| Received: 07.09.2019 | Accepted: 14.09.2019 | Published: 30.09.2019

*Corresponding author: Elhjouji Abderrahman

Abstract

Case Report

Background: Hydatid pathology is endemic in our region. Although hepatic and pulmonary sites are the most common, the parasite can implant in any part of the body. We will report an exceptional case of retro-vesical hydatid cyst complicated by bowel obstruction. **Case presentation:** 45-year-old patient, admitted to the emergency department for an occlusive syndrome, the clinical examination found, distended tympanic but flexible abdomen, rectal examination: empty bulb. The biological assessment was without particularity. An abdominopelvic CT showed a cystic mass in the Douglas pouch with caliber disparity of bowel and intestinal distension upstream evoking a retro-vesical hydatid cyst. The patient was operated, a monobloc resection of hydatid cyst was performed. The postoperative course was simple. The biological analysis confirmed the diagnosis of retro-vesical hydatid cyst. **Conclusion:** The retrovesical localization of hydatid cyst is rare, often asymptomatic, the clinical signs occur at a stage where the volume of the cyst is quite important. The diagnosis is often made by ultrasound coupled with CT. The hydatid serology has a great value of diagnostic orientation. The treatment is surgical based on a total perkysectomy. In an endemic area, any pelvic cystic mass must evoke a hydatid cyst.

Keywords: Hydatid cyst, Occlusion, Surgery.

Copyright © 2019: This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

INTRODUCTION

Hydatid pathology is endemic in our region. Although hepatic and pulmonary sites are the most common, the parasite can implant in any part of the body. Pelvic retrovesical location represents less than 1% of cases in the literature [1]. We will report an exceptional case of secondary acute intestinal obstruction to a retro-vesical hydatid cyst, by trying to meet the various challenges identified by this pathology

CASE PRESENTATION

45-year-old patient, with no particular pathological history, admitted to the emergency department for an occlusive syndrome dating back to 3 days before his hospitalization. The clinical examination found a patient in fairly good general condition, temperature 37°C, distended abdomen tympanic but flexible, digital rectal examination: ampoule rectal empty. The biological assessment revealed leukocytosis at 12000 / mm³, a slight functional renal failure. X-ray of the abdomen without preparation showed intestinal hydro-aerial levels. An abdominopelvic CT showed an intestinal distension with caliber disparity regarding a cystic mass in the

Douglas pouch, hypodense of 7 cm in diameter, well limited evoking a retro-vesical hydatid cyst. Another hydatid cyst type 1 of 3 cm in diameter, was located in the spleen (Figure 1 & 2). The liver was normal. The chest x-ray did not show a thoracic location. The patient was admitted to the operating room, an umbilical laparotomy was performed. After exposure and retro-grade emptying, exploration found a cystic mass occupying the Douglas pouch with intimate adhesions with the ileum responsible for caliber disparity with intestinal distention upstream, no other localization was found apart the hydatid cyst of the spleen. Hydatid cyst monobloc resection was performed after its release from its bladder and parietal attachments and after aspiration of its contents to prevent an intraoperative rupture responsible for recurrence (Figure 3 & 4). Splenic hydatid cyst was respected. The patient discharged at D+3 with no postoperative complications. The biological analysis of the cyst fluid as well as the hydatid serology confirmed the diagnosis of retro-vesical hydatid cyst. The patient received postoperative Albendazole for 3 months and follow up done 6 months after surgery with no complications.

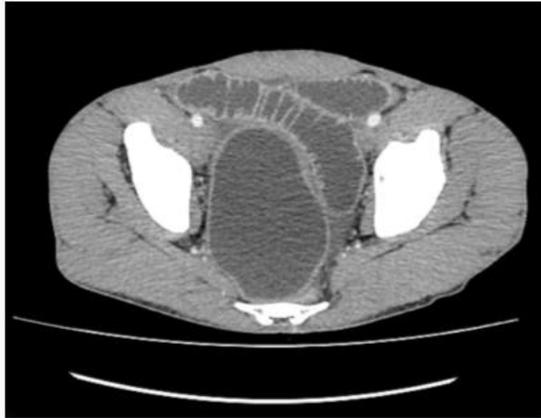


Fig-1: CT image showing pelvic hydatid cyst with distended ileum



Fig-2: CT image showing the splenic cyst

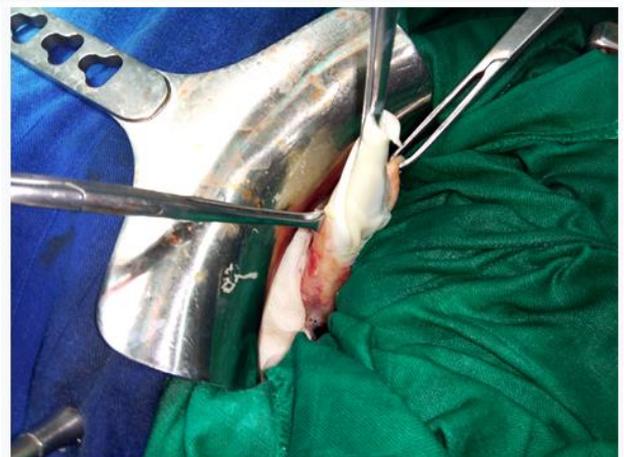


Fig-4: Operative image showing the open pelvic hydatid cyst with extraction of the proliferous membrane



Fig-3: Operative image showing the pelvic hydatid cyst

DISCUSSION

Retrovesical hydatid cysts are considered to be an "aberrantly" or "ectopic" localization and result from parasite development in sub- and retrovesical fat. They can be divided into two types: those with intraperitoneal development, and those with peritoneal development [2, 3]. The mode of contamination is not well understood. It is most often secondary to a rupture of hepatic hydatid cyst in the peritoneal cavity with daughter cysts who continue their development. A secondary endothelium excludes them from the peritoneal cavity. However cases of primitive pelvic hydatid cyst as is the case of our patient have been reported. They are probably secondary to haematogenous contamination after passing through the liver and lung filter by the parasite. This form can be retained only in the absence of other hepatic or pulmonary localization [4-6]. This affection has a slow and silent evolution which explains why the signs as is the case of our patient who did not complain of any functional symptomatology before the installation of the occlusive syndrome. Bowel obstruction may be secondary to extrinsic compression or development of fleshy adhesions with the gastrointestinal tract. Diagnosis is often carried by imaging. Abdominal-pelvic CT is the gold standard for occlusive complication. Intestinal distention may

interfere with ultrasound scanning [7, 1]. The echographic classification of liver hydatid cyst is also valid for pelvic hydatid cyst [8]. Differential diagnosis may occur with ovarian cyst, ovarian tumor, seminal vesicle cyst, large ectopic ureterocele, posterior bladder diverticulum [7, 9]. In this case, the use of biology with serology is very useful. Magnetic resonance imaging allows the analysis of pelvic reports of the hydatid cyst inaccessible to CT. It also allows in case of doubt to make the differential diagnosis with perirectal, and vestigial tumors of nerve or bone [4]. Surgical treatment remains the only therapeutic option. The monobloc resection of the cyst after protection of the operative field should be carried out if possible, otherwise resection of the protruding dome is recommended in case of close adhesion with the neighboring structures. Medical treatment based on Albendazole can be prescribed postoperatively on a case by case basis. There is no consensus on the indications and / or duration of treatment [7, 10]

CONCLUSION

The retro-vesical localization of hydatid cyst is rare, often asymptomatic, the clinical signs occur at a stage where the volume of the cyst is quite important. The diagnosis is often made by ultrasound coupled with CT. The hydatid serology has a great value of diagnostic orientation. The treatment is surgical based on a total perikystectomy. In an endemic area, any pelvic cystic mass must evoke a hydatid cyst. Big effort must be expended to combat this affection which is a public health problem in our country.

Ethics approval and consent to participate: Not applicable

Consent for Publication: Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

ACKNOWLEDGEMENTS

The authors thank the team of Department of Digestive Surgery Guelmim Military Hospital for providing support and helping in the preparation of the manuscript.

Competing interests: The authors declare that they have no competing interests.

Funding: No funding

Authors' Contributions: All authors contributed to the treatment of the patient and to the conception, writing, and revision of the manuscript. All authors read and approved the final manuscript.

REFERENCES

1. Hafsa C, Golli M, Kriaa S, Salem R, Omezzine SJ, Bourogaa S, Belguith M, Nouri A, Gannouni A. Le kyste hydatique rétrovésical chez l'enfant: à propos de trois cas. *Journal de Radiologie*. 2007 Jun 1;88(7-8):968-71.
2. Khouaja MK, Ben Sorba N, Haddad N, Mosbah AT. Le kyste hydatique rétrovésical: aspects diagnostiques et thérapeutiques à propos de 8 cas. *Progrès en urologie*. 2004;14(4):489-92.
3. Vaidyanathan S, Rao MS, Sharma SK, Rajendran LJ, Subudhi CL, Rao KM, Shrikhande VV, Bapna BC. Non-operative management of a pelvic hydatid cyst communicating with the bladder. *The Journal of urology*. 1979 Feb;121(2):245-7.
4. Boukaidi ML, Bouhya S, Soummani A, Hermas S, Bennan O, Sefrioui O, Aderdour M. Kystes hydatiques pelviens: à propos de huit cas. *Gynécologie obstétrique & fertilité*. 2001 May 1;29(5):354-357.
5. Ben Adballah R, Hajri M, Aoun K, Ayed M. Kyste hydatique rétrovésical et rétropéritonéal extrarénal: étude descriptive sur 9 cas. *Progrès en urologie*. 2000;10(3):424-431.
6. Tajdine MT, Daali M. Kyste hydatique pelvien isolé: à propos de 1 cas pédiatrique. *Archives de pédiatrie*. 2007;11(14):1367-1368.
7. Boufettal R. Kyste hydatique pelvien primitif (à propos d'un cas). *Journal Marocain d'Urologie*. 2008 Mar 1;1(9):34-6.
8. Moussaoui EL, Aboutaieb R, Joual A, El Mrini M, Meziane F, Benjellon S. Le kyste hydatique rétrovésical isolé: à propos de deux cas. *J Urol*. 1994;100:101-104.
9. Touiti D, Ameer A, Chohou K, Alkandry S, Oukheira H, Borki K. Le kyste hydatique du cul-de-sac de Douglas fistulisé dans la vessie. À propos de deux cas. *In Annales d'urologie* 2001 Jan 1; 35(4), 216-219.
10. Abi F, El Fares F, Khaiz D, Bouzidi A. Les localisations inhabituelles du kyste hydatique. À propos de 40 cas. *Journal de chirurgie*. 1989;126(5):307-12.