



Localization of a Retro Rectal Hydatid Cyst: A Rare Case Report



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Abstract

Cystic Echinococcosis (CE) is a worldwide zoonotic infection caused by the larval stage of *Echinococcus granulosus*. It has a widespread distribution in the human population of Tunisia. The liver hydatid cysts are the most common abdominal site. However, other rare intra cavity location, can occur. We report the case of 56-year-old patient with surgical history for liver hydatid cyst. Ten years after surgery, he was presented with chronic abdominal pain and constipation. The imaging results were all in favor of a retro rectal hydatid cyst. A total resection of the hydatid cyst was executed good outcomes. [*Bangladesh Journal of Infectious Diseases, December 2023;10(2):101-103*]

Keywords: Hydatid cyst; echinococcosis; retro rectal

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Introduction

Cystic Echinococcosis (CE) is a worldwide zoonotic infection caused by the larval stage of *Echinococcus granulosus*¹. In Tunisia, CE is endemic and considered as a major public health problem, especially in rural areas²⁻⁴. CE remains a serious health, social and economic problem in Tunisia⁵.

In humans, CE presents usually symptoms associated with the presence of cysts in the liver which is the most frequently affected organ⁵.

However, other organs can be affected. Through a study of an observation of a rare retro rectal hydatid cyst, the clinical and therapeutic aspects are being discussed.

Case Presentation

This present case concerns a 56-year-old patient with surgical history of liver hydatid cyst. He was operated on prominent dome resection in 2011. The postoperative follow-up showed no complications. Ten years after

surgery, he developed an abdominal discomfort, a slight peri umbilical pain and a persistent change of bowel habits, including a chronic constipation. The patient appeared to be in good general health. Clinical exam demonstrated a minor abdominal meteorism and widespread tympany without peritoneal symptoms.

The scar of the prior laparotomy was solid. No lump was discovered during the rectal examination. An abdominal ultrasound discovered the presence of a giant masse in the retro rectal region that suggested a type III hydatid cyst. An abdominal MRI was performed that showed a giant retro rectal mass measuring 17 cm in diameter. The MRI appearance of the retro rectal lesion was typical of a hydatid cyst due to the presence of multiple cysts within the mass (Figure I).

We decided to conduct an exploratory laparotomy. The anterior abdominal approach allows the complete resection of a retrorectal large tumor mass, and provides an interesting alternative to the posterior approach, with low morbidity and an absence of functional impairment. On initial intra operative examination, the liver, stomach, small bowels and colon were normal in appearance. The dissection of the retro rectal region, have found a giant hydatid cyst (Figure II).

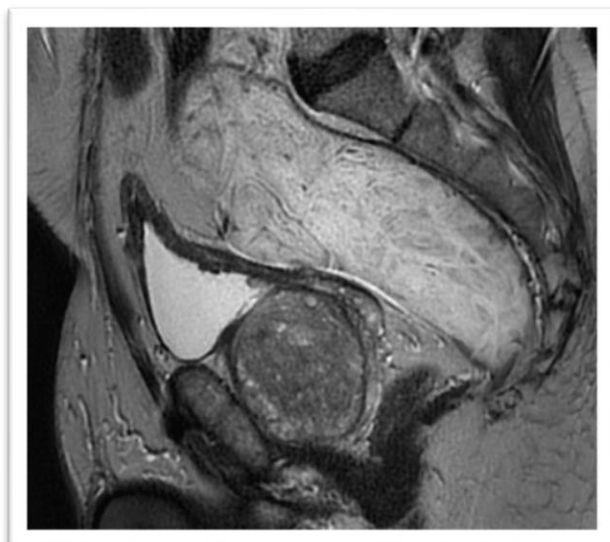


Figure I: Abdominal MRI showing a giant masse in the retro rectal region

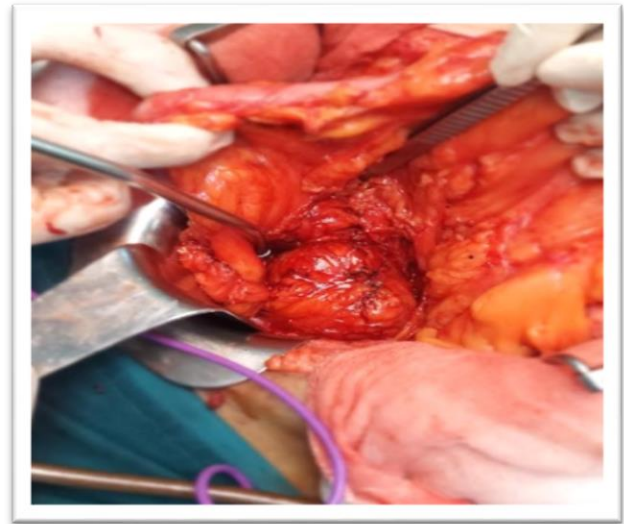


Figure II: Intraoperative view: A giant Hydatid Cyst of the retrorectal region

We have proceeded with a total resection of the cyst (Figure III). Postoperative outcome was uneventful and the patient was discharged on the fourth postoperative day. The patient is currently under observation. An abdominal CT scan after six months has shown no hydatid recurrence.



Figure III: Showing Retrorectal Hydatid Cyst after Total Resection

Discussion

Hydatid cysts can develop in any organ such as kidneys, spleen, bile ducts, mesentery, brain, and soft tissue⁴. Larvae emerge from the eggs in the

intestine; after invasion to the blood vessels, most of the embryos are trapped in the liver. The usual destination is the liver via the portal tract, but sometimes the larvae pass through the liver barrier and reach the lungs and all the other internal organs, where they transform into small cysts⁴. It is highly likely that systemic dissemination via the lymphatic route may be responsible for cases with solitary cysts in unusual sites⁵.

Retrorectal masses are a heterogeneous group of both benign and malignant tumors and the majority of them are congenital and cystic⁵. Thus, differential diagnosis is difficult for the retrorectal masses. Ultrasound is a useful tool for determination of localization, size, type and diagnosis of the cyst. Moreover, Computed Tomography can be helpful for the other organ involvement and preparation of the surgery.

Conclusion

Hydatid disease continues to be a serious public health problem in many countries. In the differential diagnosis of the retrorectal and pelvic masses in endemic regions, unusual localization of CE should always be considered. Total resection of the cyst remains the best choice of treatment.

Acknowledgments

None

Conflict of Interest

We declare that we have no conflict of interest.

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Contribution to authors

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Data Availability

Any questions regarding the availability of the study's supporting data should be addressed to the corresponding author, who can provide it upon justifiable request.

Ethics Approval and Consent to Participate

Written consent has been from the participants. Institutional ethical clearance is not applicable.

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