

Short Report

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A rare case of uterine hydatid cyst in disseminated hydatidosis**Sachin Khanduri; Avani Kanojia*; Aniket Chugh; Aastha Agrawal; Sana**

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Abstract

Hydatid disease, caused by *Echinococcus* species, primarily affects the liver and lungs but can occasionally involve unusual anatomical locations. We report a rare case of disseminated hydatidosis in a middle-aged female with an atypical hydatid cyst embedded within the posterior uterine wall. The diagnostic challenge posed by the cystic lesion in the recto-uterine pouch underscores the importance of multimodal imaging in identifying uncommon presentations of the disease.

Keywords: Hydatid disease; Uterine hydatid cyst; Atypical hydatidosis; Posterior uterine wall; CT imaging.

Introduction

Echinococcus is a parasitic worm with four forms that named *Echinococcus granulosus*, *E. multilocularis*, *E. vogeli* and *E. oligarthrus*. Disease that made by this parasite (mostly by *E. granulosus*) was named Hydatidosis (*Echinococcosis*) [1]. *E. granulosus* has lifespan of 5-20 month. This tapeworm's long is 5 mm. Its definitive host is canids, mostly dogs. *Echinococcus* grows up in intestine (jejunum) and releases the eggs. Eggs excreted with the feces and ingested by intermediate hosts (sheep, cattle, pigs, horses, camels and humans) [2]. The liver (75%) and lungs (15%) are the most commonly affected organs, with extrahepatic dissemination being rare. Genital tract involvement is extremely uncommon, accounting for less than 0.5% of reported cases. Here, we describe an unusual case of hydatid disease with disseminated hepatic and peritoneal involvement, along with an atypical hydatid cyst embedded in the posterior uterine wall, highlighting its diagnostic and surgical implications.

Case presentation

A 45-year-old female presented with chronic, nonspecific abdominal pain and secondary infertility, with no history of previous surgeries, trauma, or known parasitic infections. Physical

examination was unremarkable, with no palpable abdominal masses or organomegaly. Ultrasound revealed multiple cystic lesions in the hepatic and peritoneal regions, suggestive of disseminated hydatidosis, along with a distinct cystic lesion in the recto-uterine pouch, posing a diagnostic challenge. Computed Tomography (CT) scan identified a well-demarcated cystic lesion within the posterior uterine wall, an unusual finding given the rarity of hydatid disease involving the myometrium, with no signs of calcification or daughter cysts. Serological testing through Enzyme-Linked Immunosorbent Assay (ELISA) for *Echinococcus* antibodies was positive.

Discussion

While hepatic and peritoneal hydatidosis is well-documented, involvement of the uterus is exceedingly rare. The most plausible explanation for this dissemination is hematogenous or lymphatic spread from a primary hepatic focus. The differential diagnosis for uterine cystic lesions includes müllerian cysts, endometriotic cysts, and degenerated fibroids, making definitive preoperative diagnosis challenging. This case underscores the importance of considering hydatid disease in the differential diagnosis of cystic lesions in endemic regions.



Figure 1: Shows sagittal CECT whole abdomen-hydatid cyst in the posterior myometrium of the uterus compressing the endometrium.



Figure 2: Shows coronal CECT whole abdomen showing liver (blue arrow), peritoneal (yellow arrow) and uterine (red arrow) hydatid cysts.



Figure 3: Shows axial CECT whole abdomen showing uterine hydatid in the posterior myometrium pushing the endometrium anteriorly.



Figure 4: Shows axial CECT whole abdomen showing peritoneal hydatids.

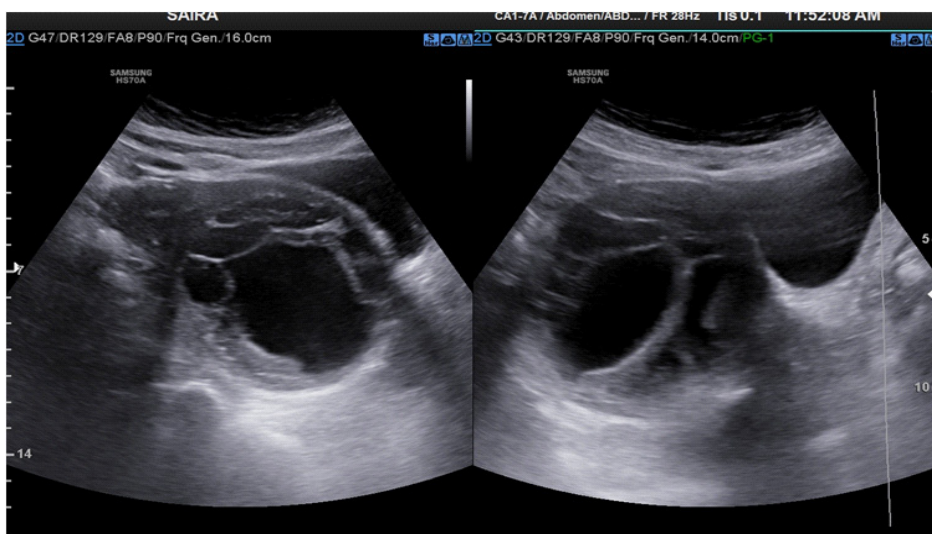


Figure 5: Ultrasound images of the Uterine Hydatid Cysts pushing the Endometrium anteriorly.

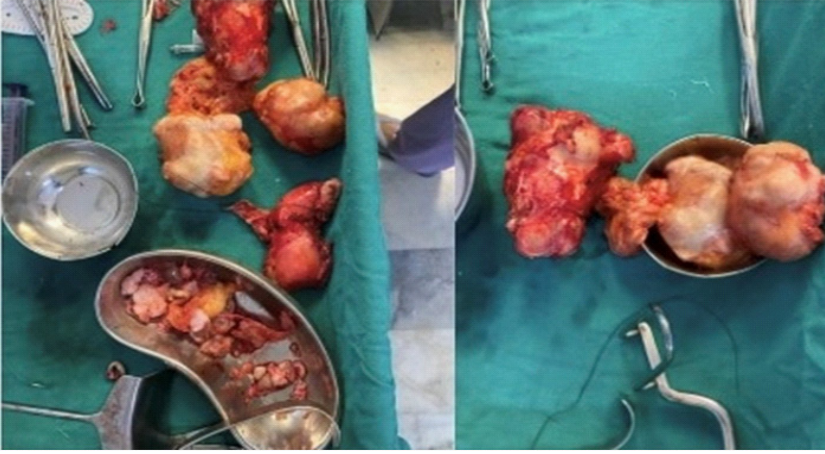


Figure 6: Post operative specimens of the hydatid cysts.

Albendazole may serve as a therapeutic option alongside surgical and percutaneous treatment [3]. It is not recommended as a first-line treatment and is generally avoided during pregnancy, particularly in the first trimester, due to the risk of teratogenicity [4]. Timely surgical intervention for pelvic cysts leading to obstructive uropathy can help prevent further renal damage [5].

Conclusion

This case highlights an atypical presentation of disseminated hydatidurias with a rare uterine hydatid cyst, emphasizing the need for a high index of suspicion and multimodal imaging for accurate diagnosis. Surgical excision remains the mainstay of treatment, complemented by antiparasitic therapy to minimize recurrence.

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