

Hydatid Cyst Spleen and Right Adnexa of Uterus

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Abstract: Introduction: Hydatid Cysts, or Hydatidosis, result from an intermediary host to *Taenia Echinococcus* larva turning into a cyst within the organism. Hydatidosis is a common zoonosis that affects many humans and animals, especially in poorly developed countries. The most frequently involved organs are the liver, followed by the lung. The involvement of the genital tract is rare, and the occurrence in the uterus is an extreme rarity. Case: A 32yr F P2L2 presented with menorrhagia for 3 months, pain lower abdomen for 1 month and heaviness in the lower abdomen for 1 month. No history of loss of weight and appetite. On physical and gynaecological examinations, no pathological finding was detected. USG and CT revealed a hydatid cyst in the spleen and right adnexa. Conclusion: Hydatid cysts in the genital tract are rare, and their occurrence in the adnexa is an extreme rarity. Differentiation between hydatid cysts and malignant disease of the related organ is difficult. To avoid misdiagnosis, a careful examination of pelvic masses should be carried out in endemic areas to detect hydatid cysts.

Keywords: hydatid cyst; uterus; echinococcus granulosis; spleen

1. Introduction

Echinococcosis is the anthroozoonosis of parasitic origin responsible for development of the hydatid cyst and the hydatid sickness. It can come from dogs, sheep or cattle or, exceptionally, humans. Based on a case of hydatid cyst in the uterus, the A careful sonographic examination of the pelvic masses should be carried out to avoid wrong diagnosis as accurate preoperative detection is very essential for the patient's well-being.¹

Hydatidosis is a common zoonosis, which may be endemic in some parts of the world. The disease, especially in poorly developed countries, affects large number of humans and animals. The infesting parasite is the smallest taenia adult of the cestodes which has the largest larva. It has four forms named *Echinococcus granulosis*, *E. multilocularis*, *E. vogeli* and *E. oligarthrus* (very rare in humans). The definitive hosts are canids, mostly dogs. The tapeworms grow into adulthood in the host intestines and release their eggs in the feces. These eggs are ingested by intermediate hosts (sheep, cattle, pigs, horses, camels and humans). The larvae migrate through the intestinal wall invading other tissues. The most frequently involved organ is liver (75%), followed by the lung (15%) and the remainder of the body (10%)^{2, 3}. Hydatid sickness combines all the toxic and allergic symptoms produced by the hydatid cyst. The involvement of the genital tract is rare and the occurrence in the uterus is an extreme rarity. Clinical history, serologic tests and various imaging techniques such as ultrasonography (USG), computed tomography (CT) and magnetic resonance imaging (MRI) can help make the diagnosis. It may be confused with malignancies of the affected organs.

2. Case

A 32-year-old woman, gravida two, para two, was admitted to Rajindra Hospital, Patiala with menorrhagia since 3 months, heaviness in lower abdomen and pain lower abdomen since 1 month. No history of previous surgery. Serum β -human chorionic gonadotropin was done, and the result was negative. On physical examination, no

pathological finding was noted. A adnexal mass was palpated during the pelvic examination. The pulse was normal and blood pressure was slightly elevated. Routine emergency laboratory findings such as hemogram, hematocrit and urinalysis were also found insignificant for diagnosis.

On ultrasonography, spleen was enlarged in size. A well-defined heterogenous lesions with thick wall measuring 9 x 7 cm in spleen measuring, s/o hydatid cyst and foci of calcification seen with in the spleen and well-defined cystic lesion with thick wall measuring 10x9 cm seen in the pelvis posterior to urinary bladder and uterus in right adnexa. It was pushing uterus anteriorly. She was diagnosed by gynecologists and sonologists to be suffering from hydatidiform mole. She was diagnosed as a case of hydatid cyst in uterus only by ultrasound scan.

On CT scan, there was heterogenous mass with loci of calcification seen on the upper pole of spleen measuring 5.5x5.9 cm. and a large well defined encapsulated lesion seen in right adnexa measuring 12 X 10.6 cm. The mass had multiple septations with fluid attenuated cysts of variable sizes, s/o hydatid cyst.

Exploratory Laparotomy was performed and splenectomy with total abdominal hysterectomy with cystectomy done under GA. The specimens (spleen, daughter cysts, uterus with BSO) were sent for histopathological examination. There was a 12-cm-diameter cyst in spleen, in uterus with innumerable daughter cysts outside the spleen and in the wall of uterus. The spaces between the bladder and uterus on the right side showed variable sized cyst. No extension to the cervix was noted (Figure 1).

The postoperative course was uneventful and the patient was discharged in perfect health. The specimen was evaluated in the department of pathology. Government Medical College, Patiala and reported as hydatid cyst of the spleen, uterus and right adnexa. The total abdominal hysterectomy specimen with adnexa measured 8 x 8 x 7.5 cm with a smooth peritoneal surface. Cut section revealed a unilocular white cyst with diameter of 4 cm and opalescent fluid within in the adnexa. Microscopic examination showed scolices of

Echinococcus granulosus with adjacent laminated membrane.



Figure 1: A cut in surface of the uterine right adnexa shows white cyst with surrounding fibrous capsule



Figure 2: A cut in surface of the spleen shows white cyst



Figure 3: A cut in surface of the uterine right adnexa shows white cyst

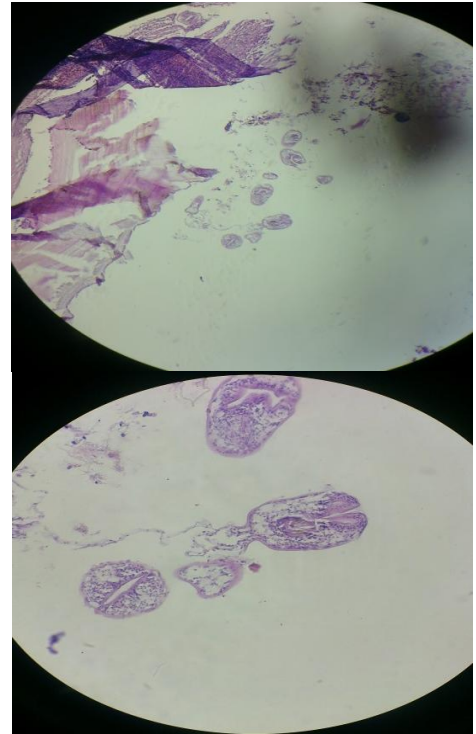


Figure 4: Photomicrograph of the lesion reveals laminated membrane and the scolices surrounded by fibrous capsule

3. Discussion

The unusual localization of hydatid cyst in the brain, heart, pericardium, kidney, intraperitoneum, retroperitoneum, bone, soft tissue and breast as rare sites has been discussed in the literature³. The localization of the hydatid cyst in the uterus is an extremely rarely encountered entity and highly interesting. Basgul et al^[1] reported case of hydatid cyst in uterus, Okumus and co-workers⁴ also reported a case in which the primary involvement was uterus and the diagnosis was confirmed by microscopic studies after the surgery. Gueddana and colleagues⁵ reported a case with intrauterine Hydatidosis whose hydatid vesicles were found in the vagina and a total hysterectomy was carried out. The correct diagnosis of hydatidosis is very difficult because of the striking resemblance between the hydatid cyst and malignant disease of the related organ. If the physician lacks the high index of suspicion, the lesion may be misdiagnosed as a pelvic malignancy. Therefore, hydatid cysts should be considered in the differential diagnosis of cystic pelvic masses, especially in areas where the disease is endemic.

References

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