

Large Primary Hydatid Cyst of Uterus in Nulliparous-An Incidental Finding: Case Report

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Abstract: This is a case report of young nulliparous women presented to us with lower abdominal pain and heaviness in lower abdomen. On physical examination slightly mobile pelvic lump & ultrasound shows a multiseptated pelvic mass with no other cystic lump in abdominal viscera. Patient was subjected to exploratory laprotomy which confirmed the diagnosis of hydatid cyst arising from posterior wall of uterus. Cyst was marsupialize and uterus preserved. Patient was put on chemotherapy after surgery for six month and no recurrence found. The clinical presentation of this cyst is also very nonspecific, and it is difficult to diagnose the cyst before surgery. The gynecologists should be aware of possibility of primary hydatid cyst of the pelvic cavity and should be considered in the differential diagnosis of cystic pelvic masses, especially in areas where the disease is endemic.

Keywords: Hydatid cyst, Extrahepatic involvement, uterus, Nullipara.

INTRODUCTION

Hydrated disease (HD) may develop in almost any part of the body [1]. According to Craig and Faust [1], incidence of hydatid disease of the female pelvis is 0.2% of all the sites where the disease is found. Most cases are secondary to infection elsewhere, particularly in the liver, and a primary infection of the female pelvic organs is extremely rare [2].

Hydatid cysts with unusual localizations may cause serious problems in the differential diagnosis [1]. Hydatidosis is a common zoonosis affecting a large number of human & animals, particularly in tropics, in poorly developed countries [3]. Human disease occurs when tapeworm ova are ingested by humans, often as a result of close contact with a working or pet animals [4, 5]. In this case patient had history of contact with cattle's.

Hydatid cyst most frequently occurs in liver followed by lungs. Involvement of genital tract is very rare and hydatid cyst in uterus is extremely rare [4]. Conservative treatment is suggested for young female patients [7]. We report a rare case of hydatid cyst of uterus and uterus was conserved because patient was nulliparous.

CASE REPORT

A 24 years old nulliparous female came to us with a lower abdomen pain and lower back pain since last 4years, off & on swelling in lower limb since last 3

years. The general physical examination showed no abnormality. Per-abdominal examination revealed presence of 8x8cm cystic lump in pelvis. Bimanual examination showed that lump slightly moved side to side with uterus and cervix.

Clinically it was not possible to differentiate it from ovarian cyst or fibroid uterus (cystic degeneration).

Ultrasound finding showed mildly enlarge uterus in size and large thick wall multiseptated lesion in pelvis posterior to the uterus, large ovarian cyst and no other cystic lesion in abdomen (Fig. 1). Physical examination, Digital rectal examination, blood pressure, pulse, and lab test, RBS, electrolyte, LFT, chest X-ray were within normal limit.

Provisional diagnosis of ovarian cyst was made and exploratory laparotomy was done by lower midline incision. On exploration both ovaries was normal in size & shape adhered to uterus. A large cystic mass arising from posterior wall of uterus and cervix was present (Fig. 2). At the time of cyst evacuation brood capsule and daughter cyst were present, at that time the diagnosis of hydatid cyst was made and hypertonic saline was instilled into the cystic cavity and waited for 10 minutes. Fluid of cyst was aspirated and daughter cyst were evacuated (Fig. 3). Cyst wall excised from posterior wall of uterus to the cervix and anterior cyst wall which was adhered to uterus marsupialized and

omentum was placed at the posterior raw surface of uterus. Sponges were packed to prevent spillage of fluid. Hystectomy could not be performed because patient was young nulliparous and she needs issue.

Diagnosis of hydatid cyst was conformed histopathologically. After definite diagnosis post operatively albendazole therapy in dose of 10 mg/per

kg/day for 28 days cycle than two weak gap and 6 cycle of therapy advised.

Patients discharged on 6 post of day. Post operative period was uneventful after six month follow-up patient was asymptomatic. CECT abdomen showed no abnormality in uterus and pelvis and no other cystic lesion in solid viscera and abdomen.



Fig. 1: Pre-operative USG

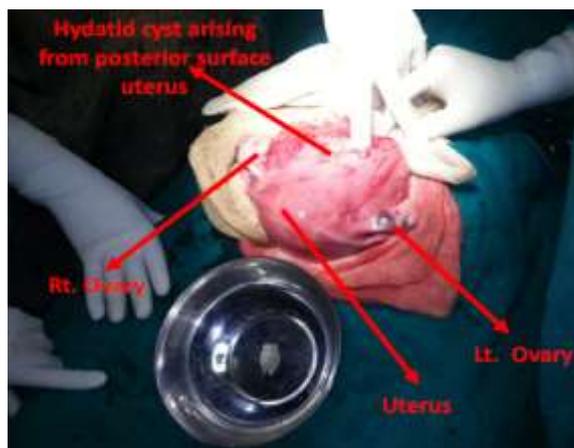


Fig. 2: A large cystic mass arising from posterior wall of uterus and cervix



Fig. 3: Fluid of cyst was aspirated and daughter cyst were evacuated



Fig. 4: Hydatid Daughter cyst and cyst wall

DISCUSSION

In this case hydatid cysts primarily arise from uterus.

Hydatid disease is a parasitic disease caused by the larval stage of the tapeworm *Echinococcus granulosus* [8]. It requires two hosts, humans become accidental intermediate hosts. The most common site involved is the liver (59–75%), followed by lung (27%), kidney (3%), bone (1–4%), and brain (1–2%) [9].

The involvement of female reproductive system is extremely rare [10, 11]. Primary hydatidosis of the pelvic cavity is very rare but well documented in endemic areas such as the Mediterranean countries, South America, the Middle East, and Australia [12, 13].

In this case hydatid cyst primarily developed from uterus and no other organ involved. Crossen and Crossen had stated that echinococcus disease of the uterus, although curiosus, is not so rare that it can be ignored in diagnosis [14].

Genital organs are reported to be the most affected areas in pelvis in female that can be related to their relative high vascularity and true invasions from connective tissue of peritoneum of Douglas and suspensory ligaments [15, 16]. Every effort should be made to preserve reproductive organ in the younger women, even in those with multiple cysts [17]

Diagnosis of the hydatid cyst is done mainly on the basis of serologic tests and/or ultrasound and CT scan [18, 19]. In our case, FNAC and other serological tests were not carried out as there was no suspicion of hydatid cyst in the pelvic region. For definitive diagnosis, surgical exploration may be necessary [18, 19]. Okumus *et al.* [20] reported a case in which the primary involvement was uterus and diagnosis was confirmed by microscopic studies after the surgery. The treatment guidelines for hydatid cysts have been précised by The World Health Organization [21].

Surgery is the treatment of choice for the patients with symptomatic disease and those are convenient for surgery [22, 23]

CONCLUSION

This is a rare case of primary & solitary hydatid cyst in the uterus, which was diagnosed per-operatively on exploration. The location of hydatid cyst in genital tract is rare, and its presence in the uterus is extremely rare. Conservation of uterus is essential for young female. To avoid misdiagnosis, a careful pelvic mass examination should be carried out in endemic area for detection of hydatid cyst.

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