

## Case Report

## Hydatid Cyst in the Uterus of Young Lady

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## Abstract

*Echinococcal disease remains a problem within some endemic areas. Echinococcal cysts usually involve the liver and lungs, but are extremely rare in the uterus. In this paper we report the rare case of a 27-year-old unmarried doctor presented with the complains of menorrhagia for 9 months and lump in lower abdomen for 6 months. Ultrasonography and MRI revealed a large multiloculated cystic lesion within the uterine cavity.*

*Serological tests were positive for echinococcus. The patient was operated on; cysts were removed from uterine cavity. Antihelminthics were administered postoperatively and the patient was closely followed up for 9 months, without menorrhagia or recurrence of Echinococcal cyst. Although Echinococcal cysts are extremely rare in the uterus, it can be managed successfully.*

## Introduction:

The Causative agent, Echinococcus granulosus, is widespread in sheep -rearing areas of the world.

Hydatidosis is a common zoonosis that affects a large number of humans and animals, especially in poorly developed countries. The infesting parasite has four forms named Echinococcus granulosus, E. multilocularis, E. vogeli and E. oligarthrus (very rare in humans). Echinococcal disease is an infection of humans caused by the larval stage of Echinococcus granulosus. The definitive host is dog. 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 eggs hatch in the small bowel, penetrate the gut mucosa and enter the blood stream, from which they are distributed to various sites in the body. Where the larvae settle, they begin development to form hydatid cysts<sup>1</sup>. The percentage of cysts found in the various organs differs according to the series consulted, but Echinococcus granulosus cysts are found most frequently in the liver (55-77%), followed by the lung (8.5-44%) and the remainder

of the body (10%)<sup>2</sup> such as abdominal cavity (8%), kidneys (7%) central nervous system (0.2-2.4%) and bone (1-2.5%). The involvement of the genital tract is rare and the occurrence in the uterus is an extreme rarity. Many cysts are asymptomatic and discovered incidentally at post-mortem or when radiographic or ultrasound examinations are requested for other purposes. Hydatid disease in extra hepatic locations usually remains silent unless the cyst grows and produces symptoms. Clinical history, serologic tests can be used for antibody detection in serum, for example by ELISA, complement fixation, countercurrent immunoelectrophoresis for Arc 5 or immunoblot 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. As medical treatment High-dose mebendazole was the first drug shown to be active against human hydatid disease. Mebendazole is given in a dose of 40-50 mg/kg/day. When available, albendazole should replace mebendazole therapy. The daily dose of albendazole is 10-15 mg/kg/day (equivalent to 400mg twice daily for an average adult). Both mebendazole and albendazole act against the germinal membrane of the hydatid cysts. Praziquantel is more active against proto scoleces. The dose of Praziquantel is 40mg/kg/day, given as two divided doses.

There is no consensus regarding the most appropriate drug treatment regimen for cystic hydatid disease. Some authorities advocate a<sup>3</sup> month albendazole regimen without interruption, subject to tolerance, along with praziquantel for the

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first 2 weeks. At the end of the 3 months, the disease should be reassessed and a decision taken either to proceed with surgery or to continue the course for one year. Surgical treatment depends upon the nature of individual cases of various organs. Scolicidal agents used in hydatid surgery such as 20% hypertonic saline, 0.5% silver nitrate or 95% sterile ethanol.

In this paper, we report the rare case of a 27-year-old unmarried doctor with a large multiloculated cystic lesion within the uterine cavity, without involvement of liver and lung. The main treatment is surgical excision followed by antihelminthics administered postoperatively.

#### **Case report:**

A 27-year-old young unmarried doctor presented with the complaints of menorrhagia for 9 months and lump in lower abdomen for 6 months. Her menstrual cycle was regular menstrual period was 2-5 days but menstrual flow gradually increased with passage of clot blood pass without dysmenorrhoea. She did not report/history of amenorrhoea, episodes of fever, cough, and vomiting and weight loss.

On General examination the pulse and blood pressure were normal. She was mildly anemic. On pelvic examination, Lump in lower abdomen, approximately 12 x 12 cm in diameter was palpated which move side to side but did not move above down wards. No other abnormality was detected on general and systemic examination.

Routine laboratory findings such as, hematocrit, X-ray,  $\beta$  HCG label, stool for OBT and urinalysis were also found insignificant for diagnosis. Blood tests showed mild anemia-haemoglobin - 8 g /dl, with increased eosinophil count gradually -5%, 12% then 20%. Ultrasonography (USG) revealed a large multiloculated fluid-filled cystic lesion within the uterine cavity. Magnetic resonance imaging (MRI) by the department of Radiology and Imaging in Sir Salimullah Medical College and Mitford Hospital, on 27th December, 2009, revealed a large multiloculated cystic lesion measuring about 12x12x11 cm within the uterine cavity with surrounding thin myometrial rim showing hypo intensity on T1NI, hyper intensity on T2NI, there was no involvement of the myometrium. Serological tests were positive for echinococcus Ab on IHA method in Microbiology

& Immunology department of Bangabandhu Sheikh Mujib medical University, on 30th October, 2009. The Patient was admitted in BSMMU for operative procedure on 10th April, 2010, with diagnosis as a case of Hydatid cysts in the uterus. On 20th April, 2010, the patient underwent an exploratory laparotomy after taking all aseptic precaution, lower mid line incision was made. Then uterus was explored for the diagnosis of the unusual mass within the body of the uterus. A large cystic lesion was occupying the whole uterine cavity. Many endocyst were within the uterine cavity. 50 ml of hypertonic normal saline solution was introduced within the cyst. Then 5 minutes interval cystic fluid aspirate by 50 cc syringe. About 500 ml fluid was aspirate. Then cyst wall incised and removed from uterine cavity. After proper homeostasis and wash by hypertonic normal saline solution. The uterus was closed in layers. Then drain tube kept at the pelvic cavity and abdomen was closed in layers. The postoperative course was uneventful and the patient was discharged in perfect health. Part of the cyst was evaluated in the pathology department of the University and reported as hydatid cyst. Antihelminthic albendazole was administered postoperatively and the patient was closely followed up for 1 year, without menorrhagia or recurrence of Echinococcal cyst in the uterus.

#### **Conclusions:**

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 literature.<sup>3</sup> The localization of the hydatid cyst in the uterus is an extremely rarely encountered entity and highly interesting. Gueddana and colleagues<sup>4</sup> reported case with intrauterine hydatidosis whose hydatid vesicles were found in the vagina and a total hysterectomy was carried out. Okumus and co-workers<sup>5</sup> also reported a case in which the primary involvement was uterus and the diagnosis was confirmed by microscopic studies after the surgery. Hydatid cysts in the genital tract are rare and the occurrence in the uterus is an extreme rarity. Differentiation between hydatid cyst and malignant disease of the related organ is difficult. To avoid misdiagnosis, a careful examination of pelvic masses should be carried out for detection of hydatid cysts. Therefore, hydatid cysts should be

considered in the differential diagnosis of cystic pelvic masses, it was not so difficult to make the correct diagnosis in our case preoperatively because of laboratory facilities was available here. 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.

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### Case Report

## Diagnosis of Testicular Choriocarcinoma: A Case Study

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#### Abstract

*Testicular cancer, although relatively rare, is the most common malignancy in men at the age of 15 to 35 years. Germ cell tumor (GCT) is the most common testicular tumor (90%-95%) and peak age of incidence is between 20 years to 50 years. Choriocarcinoma is very rare in male as a pure testicular tumor (<1%) but may be seen as a component of mixed GCT. These tumors characteristically secrete hCG (human chorionic gonadotrophin) into the serum, which use as an important serum tumor marker for these tumors. A 30 years old male presented to us with the complaints of hard feeling of the left testis for 6 months which was initiated with mild pain but the size of the testis was unchanged. On examination there was an indurated area (2cm X 2cm) at lower part of the left testis and epididymis felt separately. He had no history crypto-orchidism, orchitis and scrotal trauma. Ultrasonogram showed a mixed echoic mass lesion (13X10mm) at infero-medial aspect left testis with an epididymal cyst. On laboratory investigation his  $\beta$ -hCG and AFP level were 306 MIU/L (high) & 6.3 IU/L respectively. Contrast enhanced CT scan of the whole abdomen revealed no abnormality except enlarged lymph node (>1 CM) in right lower lung. Fine needle aspiration cytology (FNAC)*

*showed features of chronic orchitis. We explored his left testis because of high  $\beta$ -hCG through inguinal approach and suspected testicular tissue was sent for frozen section biopsy which also revealed inconclusive findings. On the basis of his high  $\beta$ -hCG, we performed left radical orchidectomy. Histopathology of the left testis showed features of Choriocarcinoma, epididymis and spermatic cord were normal. According to TNM classification, AJCC (American Joint Committee on Cancer) staging and international germ cell consensus prognostic classification it was T3N0M1S1, stage IIIa and intermediate prognosis group respectively. Post-orchidectomy  $\beta$ -hCG dropped to 7.3 MIU/ML. Now he is on systemic chemotherapy BEP (bleomycin, etoposide, cisplatin). Choriocarcinoma, though is a rare malignancy, it may affect young men in the prime of life and is the most aggressive histologic variant of germ cell tumor. But it has a good prognosis if diagnosed early and treated accurately. Serum  $\beta$ -hCG level plays most important role in diagnosis, in monitoring therapy and follow-up of patients with choriocarcinoma.*

**Key Words:**  $\beta$ -hCG, Testicular Carcinoma, Choriocarcinoma

#### Introduction:

Testicular cancer, although relatively rare, is the

most common malignancy in men at the age of 15 to 35 years. Testicular cancer represents between 1% and 1.5% of male neoplasms and 5% of all urological cancer. The classification of testicular tumors is complex and controversial. Germ cell tumor (GCT) is the most common testicular tumor (90%-95%) and peak age of incidence is between 20 years to 50 years<sup>1</sup>. Choriocarcinoma is very rare in males as a pure testicular tumor (<1%) but may be seen as a component of mixed GCT. These tumors characteristically secrete hCG (human

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