

## HYDATID CYST IN UTERUS

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### ABSTRACT

**Background:** Hydatidosis is zoonosis that affects especially in under developed countries. The most frequently involved organs are liver followed by the lung. The involvement of the genital tract is rare and the occurrence in the uterus is an extreme rarity. We report a case of hydatid cyst in the uterus which is presented with lower abdominal pain. **Case:** A-years 36 old female with a history of hydatid cysts of the liver, was admitted to hospital after complaining of low abdominal pains and lower back pain. On investigating revealed a cystic mass in the uterus with a size of 10 × 10 cm. After further examinations a subtotal hysterectomy was performed. Microscopic examination showed hydatidosis. **Conclusion:** Differentiation between hydatid cyst and malignant disease of the related organ is difficult because hydatid cysts in the genital tract are rare and the occurrence in the uterus is an extremely rare. So it should be evaluated carefully in endemic areas.

### KEY WORDS

Echinococcosis, Hydatid cyst, uterus.

### INTRODUCTION

Echinococcosis is an infection caused in humans by Echinococcus granulosus, E. multilocularis, or E. vogeli. E. granulosus, which produces cystic lesions, is prevalent in areas in association with dogs. This tapeworm mostly found in Australia, Argentina, Chile, Africa, eastern Europe, the Middle East, New Zealand etc. The small adult worm, which lives for 5 to 20 months in the jejunum of dogs, penetrate the intestinal mucosa, enter the portal circulation, and are carried to various organs, most commonly the liver and lungs. Larvae develop into fluid-filled hydatid cysts that consist of an external membrane and an inner germinal layer. Daughter cysts develop from the inner aspect of the germinal layer, as do germinating cystic structures called brood capsules. New larvae, called protoscolices, develop in large numbers within the brood capsule. The cysts expand slowly over a

period of years. Slowly enlarging echinococcal cysts generally remain asymptomatic until their expanding size or their space-occupying effect in an involved organ elicits symptoms. Rupture of or episodic leakage from a hydatid cyst may produce fever, pruritus, urticaria, eosinophilia, or anaphylaxis. Rupture of hydatid cysts may lead to multifocal dissemination of protoscolices, which can form additional cysts. It can occur spontaneously or at surgery. Other presentations are due to the involvement of bone (invasion of the medullary cavity with slow bone erosion producing pathologic fractures), the central nervous system (space-occupying lesions), the heart (conduction defects, pericarditis), and the pelvis (pelvic mass). Echinococcal cysts may also involve the cervix, which can be the primary or a secondary site of infection. The involvement of the genital tract is rare and the

occurrence in the uterus is an extreme rarity. Bickers et al (1) after reviewing 532 cases of hydatid disease from an endemic area over a 20 year period recorded 12 instances of hydatid cyst in the pelvis.

### CASE REPORT

Here we report a case of hydatid cyst of the uterine cavity which is one of the extremely rare involved sites. A 36-years-old women, gravida 3, para 2 and with 1 abortions, was referred to us with lower abdominal pain since 10days and lump associated with back pain. Previous medical history was unremarkable; surgically the patient had a caesarean section for last baby. On pelvic examination a mass of 10-12 cm in diameter was found in the lower part of the abdomen. There was no change in her bowel and bladder habits. She was menstruating regularly. She was non-vegetarian. On general physical examination, she was medium built, well nourished, not anaemic,

and there was no lymphadenopathy. On systemic examination, respiratory and cardiovascular systems were normal. On abdominal examination, there was no hepatosplenomegaly, and no ascites. On X-ray reveals a cystic mass and Ultrasonography, a large septated and cystic mass of about 10 ×10 cm was found to the right side of the uterus with a very close relationship between the uterus and the parametrium. Ultrasonographic examination demonstrated no other disease in the abdomen. Bilateral ovaries were normal. The other abdominal organs were normal and there was no free fluid. The tumour marker CA 125 was normal.

On diagnosis of cyst the patient was prepared for operation. The patient underwent an exploratory laparotomy for the diagnosis of the unusual mass within the body of the uterus under general anesthesia which is shown in **Figure: 1**.

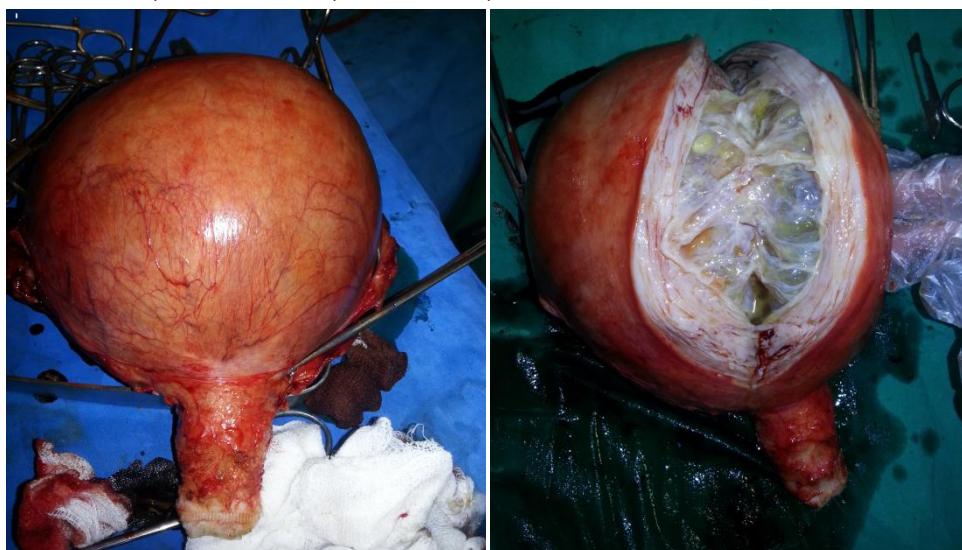


Figure: 1

An endometrial biopsy or diagnostic curettage to rule out malignancy was not performed since the mass in the cavity was multilocular cysts. A subtotal hysterectomy was performed. The diagnosis of hydatid cyst was confirmed histologically and the indirect hemagglutination test was positive in 1/260 titration. After definite diagnosis postoperatively Albendazole therapy was started in doses of 10 mg/kg/day for 10 weeks as a prophylactic. The patient progressed well and was discharged on the 8th day post operatively. After 2 months follow-up patient was asymptomatic.

### DISCUSSION

Hydatid cyst in the brain, heart, pericardium, kidney, intraperitoneum, retroperitoneum, bone, soft tissue and breast are identified rare sites has been discussed in the literature (2). The localization of the hydatid cyst in the uterus is an extremely rare entity. Gueddani and colleagues (3) reported a case with intrauterine hydatidosis whose hydatid vesicles were found in the vagina and a total hysterectomy was carried out. Okumus and co-workers (4) also reported a case in which the primary involvement was uterus and the diagnosis was confirmed by microscopic

studies after the surgery. The correct diagnosis of hydatidosis is very difficult because hydatid cyst and malignant disease of the related organ resembles same. Unfortunately, it was difficult to make the correct diagnosis in our case preoperatively, the lesion thought to be misdiagnosed as a pelvic malignancy.

Fine needle aspiration cytology (FNAC) may help in establishing the diagnosis of unilocular cystic pelvic mass. In the past, FNAC of hydatid cyst was thought to cause severe anaphylactic reactions (5). FNAC was not done in our case as we were suspecting it to be a malignant ovarian tumour. Casoni's intradermal test (CIT) and indirect haemagglutination test (IHA) are positive in variable number of patients. The serological tests are also useful in diagnosis of Echinococcal infection. These tests were not done in our case, as we did not suspect it to be a case of

hydatid cyst pre-operatively. Therefore, hydatid cysts should be considered in the differential diagnosis of cystic pelvic masses, especially in areas where the disease is endemic.

#### REFERENCES

1. Bickers WM. Hydatid disease of the female pelvis. *Amer J Obstet and Gynaecol* 1970;107: 477-83.
2. Engin G, Acunas B, Rozanes I, et al. Hydatid disease with unusual localization. *Eur Radiol* 2000;10: 1904-12
3. Gueddana F, Chemmen-Lebbene L, Lebbi I, et al. Intrauterine hydatidosis. A case report. *J Gynecol Obstet Biol Reprod (Paris)* 1990;19:725-7
4. Okumus Y, Tayyar M, Patiroglu T, et al. Uterine hydatid cyst. *Int J Gynaecol Obstet* 1994;45:51-3
5. Von Sinner WN, Nyman R, Linjawi T, Ali AM. Fine needle aspiration biopsy of hydatid cysts. *Acta Radiol* 1995; 36:168-72.



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