

GIANT UTERINE HYDATID CYST: A CASE REPORT

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ABSTRACT

A 68-years old woman presented with abdominal pain, nausea and vomiting. On physical examination, a palpable abdominal mass was detected in the lower abdominal region. Computed tomography revealed two separate hydatid cyst lesions in the liver in addition a giant uterine cyst. Cystotomy, external drainage and subtotal hysterectomy was performed. Pathologic examination confirmed the uterine hydatid cyst disease. In this case report, a uterine hydatid cyst disease which is rarely encountered in gynaecologic practice was presented.

Key-Words: Hydatid Cyst; Extrahepatic Involvement; Uterus

Introduction

Echinococcosis, which is often referred to as hydatid cyst or cystic echinococcosis, is common parasitic disease that affects both humans and other mammals. There are three different types of the disease in humans, each of which is caused by the larval stages of different species of the tapeworm of *Echinococcus* genus. *Echinococcus granulosus* is responsible from the most common form in humans and causes considerable morbidity and mortality. In the human manifestation of the disease, *E. granulosus* localized in the liver (in 60% of cases), the lungs (in 15% of cases) and other organs in the body such as the spleen, brain, bones, heart and kidneys.^[1] However, the hydatid cysts are localized to liver, lungs and bones in most clinical situations. Pelvic manifestations of the hydatid cysts are extremely rare. In the present case, we aimed to report a giant uterine hydatid cyst and to discuss the diagnosis and the prognosis of the uterine disease with the aid of current knowledge.

Case Reports

A 68-year old woman applied to our clinic with the complaints of abdominal pain, nausea and vomiting for 3 months. Personal and family history was unremarkable. On physical examination, an abdominal mass with a diameter of approximately 10 cm was detected in the lower abdominal localization. Complete blood count and biochemical analysis were in normal limits. Indirect hemagglutination test (IHA) was positive. Tumour markers were negative. On abdominal magnetic resonance, there were two different multiseptated cystic lesions with 12.7 x 11.1 cm and 6.6 x 5.8 cm dimensions which were located in

the right lobe of the liver (Figure 1A). In addition, a giant uterine cyst was also detected about 25x30 cm dimensions in the right uterine corpus (Figure 1B). Albendazol was started orally 400 mg twice a day. The patient was diagnosed as liver and pelvic cyst and surgical excision was planned. During exploration, a total 2 cyst hydatid lesions were detected in the liver (Figure 2A). A uterine mass which is 25 x 30 cm in size and totally fills the pelvis was also detected (Figure 2B). Cystotomy was performed for two liver cysts. Uterine mass was treated by subtotal hysterectomy. Patient was discharged with oral albendazol treatment. Pathologic examination of liver and uterus complies with the hydatid cyst diagnosis (Figure 3).

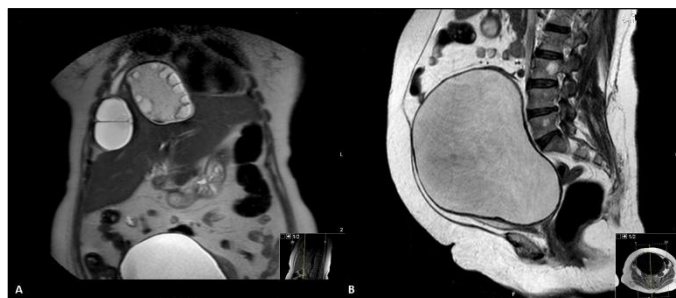


Figure-1: Abdominal magnetic resonance imaging. **A.** Two hydatid cyst lesions of the liver. **B.** Giant cystic lesion which fills uterine space.



Figure-2: Surgical pictures. **A.** Cyst hydatid lesion of the liver. **B.** Giant uterus filled with cystic material.

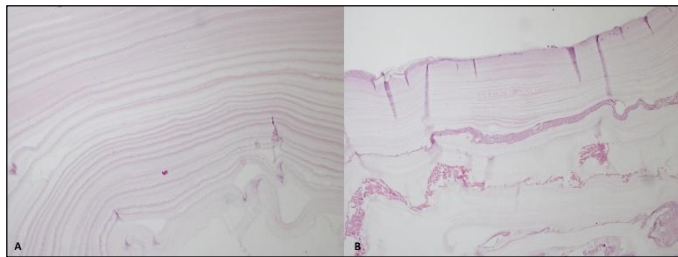


Figure-3: Histopathologic sections of the uterine cyst. **A & B.** Fibrous layer and degenerated cuticular membrane (H & E)

Discussion

Cyst hydatid is a zoonotic infection caused by *Echinococcus granulosus* and *alveolaris* which is characterized by cystic lesions of the liver, lungs and rarely other organs. Extrahepatic and extrapulmonary disease forms only 10-20% of all cases. Brain, heart, orbita, mediastinum, peritoneum, blood vessels, pleura, diaphragm, pancreas, spleen, endocrine glands, bone and genitourinary systems involvement are atypical manifestations of the disease.^[2] The primary treatment of the cyst hydatid caused by *Echinococcus granulosus* is surgery which is the only hope for complete cure.^[3] Recurrence rate after surgery was about 8-22% and most of them recognized within the first two postoperative year.^[4]

The incidence of pelvic cyst hydatid has been reported to be 0.2-0.9%.^[3,4] Of those cases, 80% localized to genital region. The ovarium is the most common localization of the genital cyst hydatid followed by uterus.^[3] These localizations are usually invaded secondary to rupture of the cysts from other tissues.^[5] Besides this, primary pelvic cyst hydatid was also reported in the literature.

Gündoğdu et al.^[6] have reported a coincidental involvement of spleen, omentum, uterus and ovarium in a case of their 133 patients with cyst hydatid series. Tepetes et al.^[7] defined a retroperitoneal ovarian cyst hydatid disease with 9 x 8 cm dimensions in a 28-year old woman using ultrasonography and magnetic resonance imaging. Similarly, Çakıcı et al.^[8] reported 3 cases with ovarian cyst hydatid who were treated with surgically. Bicher et al reported 12 cases of pelvic involvement in 532 patients with cyst hydatid in an endemic area during 20 year period. In the present case report, a giant uterine cyst hydatid was defined who was treated with a combination of surgical excision and antibiotherapy.

The pathogenesis of uterine or any other female genital organ involvement in cyst hydatid is not clear. There are several advanced theories concerning the travel of *chinococcus* to female genitalia. It is widely accepted that liver involvement mostly (in 50% of the cases) occurs via the portal vein. Other organ involvements occur in two ways of dissemination. In the first way, the scolices travel to the right side of the heart via vena cava, then pass to the lungs and finally through the left side of the heart disseminate to the whole body. In the second way, the scolices travel via peritoneal fluid to the pelvic organs following traumatic, spontaneous or iatrogenic rupture of a liver cyst into abdominal cavity. The uterine involvement in the present case is not fully understood whether a primary or secondary infection. However, presence of coincidental hepatic and uterine cysts most possibly implies the secondary uterine involvement due to rupture of the hepatic cyst.

Conclusion

In conclusion, atypical presentation of cyst hydatid should be kept in mind in the differential diagnosis of pelvic masses, particularly in endemic areas of the disease.

References

1. Bickers W. Hydatid disease of the female pelvis. *Am J Obstet Gynecol.* 1970; 107: 477-83.
2. Aleksic-Shihabi A, Vidolin EP. Cystic echinococcosis of the heart and brain: a case report. *Acta Med Okayama.* 2008;62(5):341-4.
3. Baba L, Chaieb H, Keskes J. Profil epidemiologique de l'hydatidose pelvienne. *J Gyriecol Obstet Biol Reprod (Paris).* 1991; 20: 657-60.
4. Georgahopoulos PA, Gugas CG, Sanyaninis HG. Hydatid disease of the female genitalia. *Obstet Gynecol.* 1980; 55: 555-9.
5. Rahman MS, Rahman J, Lysikiewicz A. Obstetric and gynecological presentations of hydatid disease. *Br J Obstet Gynecol.* 1982; 89: 665-70.
6. Gündoğdu C, Arslan R, Arslan MO, Gıcık Y. Evaluation of cystic and alveolar echinococcosis cases in people in Erzurum and surrounding cities. *Türkiye Parazitoloj Derg.* 2005; 29(2): 163-6.
7. Tepetes K, Christodoulidis G, Spyridakis M, Hatzitheofilou K. Large solitary retroperitoneal echinococcal cyst: a rare case report. *World J Gastroenterol.* 2007; 13(45): 6101-3.
8. Çakıcı C, Korkmaz L, İnan İ, Demirtola F, Yılankırkan H, Gökmen B. Ovarian kitlelerin ayırıcı tanısında kist hidatik. *Türkiye Klinikleri J Gynecol Obst.* 1994; 4(1): 46-8.

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