

Pelvic Hydatid Cyst Mimicking An Ovarian Neoplasm: A Case Report

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Hydatid disease is a zoonotic infection that affects a large number of animals especially in livestock producing countries like Turkey. A case of pelvic echinococcal cyst is presented, which gives the appearance of a malignant ovarian neoplasm. Patient's past history of hepatic surgery gave a clue, that it could be echinococcosis, but since the reports were lost, we could not confirm our suspicion.

Although their localization in the pelvis is rare, echinococcal cyst should be kept in mind in the differential diagnosis of pelvic masses, especially in patients of endemic regions.

Key Words: Hydatid disease, Pelvic mass

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Introduction

Hydatid disease or echinococcosis is a parasitic infection caused by *Echinococcus granulosus*. The disease is endemic in countries interested in animal husbandry. Dog is the definitive host, other mammals are intermediate hosts harbouring the larval stage.¹ Men became infected either by close contact with the definitive host, or by consuming the vegetables contaminated with eggs of *Echinococcus*.² Liver is the most commonly involved organ (60%), followed by the lungs.³ However, echinococcosis can be seen anywhere in the body.

Pelvic echinococcosis is a rare presentation of disease with an incidence of 0,2 to 0,9%.⁴ This localization is usually secondary to rupture of a hepatic cyst, but primary pelvic echinococcosis is also possible through portal system, following retroperitoneal lymphatics.

Case Report

A 70 year old post menopausal woman admitted to hospital complaining of chronic pelvic pain. She had a history of liver surgery that was performed 25 years ago. Gynecological examination revealed a right adnexial mass, that was tender on palpation. Transvaginal ultrasound exposed a well defined, multicystic mass of 17.9×11.8×18.2 cm situated in the pouch

of Douglas (Figure 1), the left adnexa was normal and uterus was in postmenopausal appearance. There were no ascites. The tumor markers and the biochemical parameters including the liver enzymes (SGOT, SGPT, ALP) were within normal ranges. On color Doppler no vascularity was seen on the mass (Figure 2). Albendazole 400 mg / day per oral started with the option that the cyst could be echinococcal depending on her history of hepatic surgery. Laparotomy was planned.



Figure 1: Transvaginal ultrasound of the pelvic mass; a well-defined, multicystic, hypoechoic mass, with solid components, measuring 17.9 × 11.8 × 18.2 cm.

At laparotomy, the pelvic cyst was found to be firmly adhered to the posterior surface of uterus, the pelvic floor and the pelvic side wall. The rectouterine pouch was obliterated. Intraoperatively, prophylactic steroids were given to take care of some spillage. Hypertonic saline-soaked pads were used. Pelvic cystectomy, total abdominal hysterectomy with bilateral salpingo-oophorectomy were performed. Pathologic ex-

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amination confirmed the diagnosis of echinococcal cyst by cuticular layer of cyst. At the microscopic examination of the cyst content, the cuticular layer and scolices were observed (Figure 3). The postoperative period was uneventful. The patient was informed about keeping at albendazole 400 mg / day per oral and discharged from the hospital and advised to have contact with a infectious disease specialist after a month.



Figure 2: Color doppler of the pelvic mass; no vascularity was observed in the solid parts

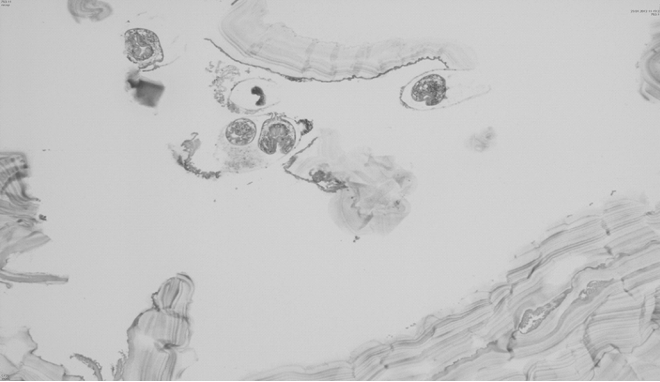


Figure 3: Microscopically, the cuticular layer and scolices were seen in the cyst lumen

Discussion

Hydatid disease is common in endemic regions, but pelvic hydatidosis is rare even in these areas.⁵ Pelvic echinococcosis can be primary or secondary. Secondary pelvic echinococcosis, which is more common, ensue from rupture of hepatic, splenic, or mesenteric cysts either spontaneously or intraoperatively. Primary pelvic disease is also reported in literature occurs after ingestion of eggs. Eggs hatch in the small bowel which release the oncosphere. It penetrates the intestinal wall, then pass through portal system and migrates following retroperitoneal lymphatics.⁶ In the present case, pelvic cyst was most probably secondary, since the patient gave a history of hepatic surgery.

Suspicion or preoperative diagnosis is crucial to prevent the dissemination of disease by rupture of the cyst. Clinically, the initial phase of the infection is asymptomatic, and patients may remain asymptomatic for many years after the initial infection. The signs of the disease depend on the size of the cyst and therefore nonspecific. ELISA is used for the confirmation of hydatid cyst with a sensitivity of 95-97%. Serology with a negative result, as in our case, does not exclude the diagnosis. The transvaginal ultrasound is a helpful diagnostic tool. In which pelvic echinococcus is observed as well defined, avascular, multicystic, mass without ascites. The sensitivity of ultrasound ranges from 93% to 98%.⁷

Prompt treatment of these cysts is recommended as they are prone to complications like rupture, hemorrhage and infection.⁸ The ideal treatment for hydatid disease is controlled open surgical excision as there is a very high possibility of uncontrolled spillage and peritoneal dissemination of the disease leading to recurrence.⁹ A recurrence rate of 2% and survival rate of 95% have been reported in patient undergoing operative intervention.¹⁰ The efficacy of Albendazole, as sole medical therapy, results in successful treatment in up to 40% of cases.¹⁰ Preoperative courses of Albendazole should be considered in order to sterilize the cyst, decrease the chance of anaphylaxis, decrease the tension in the cyst wall (thus reducing the risk of spillage during surgery), and reduce the recurrence rate postoperatively.¹¹ The antibiotherapy was started 3 days ago in our patient. Intraoperative intravenous steroids plus hypertonic saline soaked pads were used in case of the cyst rupture in the present case.

Preoperative correct diagnosis of hydatid disease is very difficult due to the challenging resemblance of this parasitic infection with the malignant disease of the related organ, but it is necessary to keep it in mind in the differential diagnosis of pelvic masses to prevent dissemination of disease.

Overyan Neoplaziyi Taklit Eden Pelvik Kist Hidatik: Vaka Sunumu

Hidatik kist, ekinokokusgranulosus tarafından oluşan, Türkiye gibi hayvancılıkla ilgilenen ülkelerde çok sayıda insan ve hayvanı etkileyen bir zoonozdur. Bu vaka sunumunda malignoveryanneoplazi görüntüsü veren bir pelvik ekinokok kisti sunulmuştur. Hastanın öyküsünde karaciğer cerrahisi bulunması bir ipucu verse de, ilgili raporların kaybolmuş olması nedeni ile şüphelerimizi ameliyat öncesi doğrulayamadık.

Ekinokok kistleri, pelvik yerleşimi nadir görülsede, özellikle endemik bölge hastalarında pelvik kitlelerin ayırıcı tanısında yer almalıdır.

Anahtar Kelimeler: Hidatik hastalık, Pelvik kitle

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