

Adneksiel Kitle Olarak Broad Ligamende Primer Kist Hidatik

Fatma Ferda VERIT

Harran Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum A.D. Şanlıurfa

ÖZET

Kist Hidatik hastalığına genellikle *echinococcus granulosus* neden olur. En sık tutulum gösteren yerler Akciğer ve Karaciğer (90%) olmasına rağmen vücudun her yerinde oluşabilir. Genital ekinokokal kist nadir olmasına rağmen, adneksiel kitlelerin ayırıcı tanısında yer almalıdır. Preoperatif yapılması gereken Ultrasonografi en önemli tanı aracı gözükmektedir. Bu olguda, adneksiel kitle taklit eden İngilizce literatürdeki ilk primer intraligamenter kist Hidatiki sundum.

Anahtar Kelimeler: Kist Hidatik, broad ligament, adneksiel kitle

Primary Hydatid Cyst In The Broad Ligament As An Adnexial Mass

ABSTRACT

Hydatid cyst disease is usually caused by echinococcus granulosus. The most common sites of involvement are liver and lungs (90%), however it can also occur anywhere in the body. Although genital echinococcus cyst is rare, differential diagnosis of adnexial masses should be made. Ultrasonography seems to be the most important diagnostic tool that should be performed preoperatively. In this case, I report the first primary intraligamenter cyst hydatid that mimicked an adnexial mass in the English literature.

Key words: Hydatid cyst, broad ligament, adnexial mass

Introduction

Echinococcosis or hydatidosis, is one of the most important zoonotic diseases in the world (1). It is a human infection caused by the larval stages of echinococcus granulosus. High parasite prevalence has been found in the eastern and southeastern region of Turkey (1). Echinococcus cysts are found more frequently in liver and lungs (90%) however, they can occur anywhere in the body. Genital echinococcal infection is extremely rare and usually develops secondary to the rupture of a liver cyst into the portal system. We reported a primary intraligamentary hydatid cyst mimicking an adnexial masses such as cystic malignancy in this study.

Case Report

A 29 year old woman, gravida 0, was referred for evaluation of a left adnexial mass. She presented with left lower quadrant pain which had persisted for approximately one month. She had regular menses and her last menstrual period was two weeks prior to admission. The gynecological history was unremarkable. A left adnexial cystic mass, approximately 6 cm in diameter, was identified after gynecological evaluations including pelvic exam and bimanual palpation. Transvaginal ultrasonography revealed an 8×6 cm semi-solid-cystic paraovarian mass, extended to cul

de sac that was suggested to have some kind of packed germinal layer inside with multiple curvilinear structures (Figure 1). The ultrasonography of other abdominal organs especially liver and spleen, chest x-ray and laboratory tests such as liver enzymes and tumor markers were normal.



Figure 1. Ultrasonographic appearance of primary intraligamentary hydatid cyst: congealed “water lily sign”.

At the time of exploratory laparotomy, a semisolid adnexial mass that was located in the left Broad ligament was observed (Figure 2). The mass was mobile, loosely adherent to the uterus and it mimicked the shape of an intraligamentary myom. Both of the ovaries, fallopian tubes and uterus were normal. There

was no ascites in the cul de sac. The anterior leaf of the Broad ligament was opened in order to explore the paraovarian mass. Ribbon shape segmented scolices and daughter cysts were observed. Towels soaked with 10% povidone-iodine solution were placed around the mass. In order to prevent metastatic lesions caused by spillage of the scolices the cyst was aspirated and washed with 10% povidone-iodine solution as scolicidal agent. A suction drainage was placed in the aspirated region. Meticulous observation and upper abdominal exploration were performed and no other organ involvement was found.



Figure 2. Intraoperative view of the primary hydatid cyst located in the left broad ligament

Histopathological assessment of cyst wall confirmed the diagnosis by showing the cuticular layer of cyst. Albendazole (800mg/dl) was given to the patient for 6 months. No recurrence was reported in 2 years follow-up.

Discussion

Echinococcus granulosus causes the hydatid disease of humans. It has a typically dog-sheep cycle and implies contamination of a sheep through the feces of an infected dog. Humans accidentally take the place of the sheep in the parasite cycle through close contact with an infected dog (2). When ingested by humans, the eggs hatch in the acidic environment of the stomach. The larva penetrates the intestinal wall; the majority entering the portal vein to reach the liver. While 70% of these larvae are captured by the liver, 30% escape the hepatic filter (3). Most of the latter are captured by the lung; however some enter the systemic circulation to reach distant sites such as the brain or abdominal and pelvic organs. Although 10 to 20 years pass before the cyst is

symptomatic, the duration of cyst formation depends on the elasticity and expandability of the organ. However, this period shortens significantly at sites of implantation where hydatid cyst formation develops after spontaneous or iatrogenic rupture of a primary cyst (2).

The incidence of pelvic echinococcus cysts is 0.2–0.9% (3). Approximately 80% of all pelvic cases involve the genital area, the ovary being the most frequent location, followed by the uterus. Spread to this organ is usually secondary to spillage and implantation of cystic products following spontaneous or iatrogenic rupture of a hydatid cyst of the liver. The incidence of recurrent disease after surgery for primary hydatid cysts is 8–22% and most recurrences occur within 2 years of operation (3).

There is no specific diagnostic test for hydatid disease. Serologic tests have a sensitivity of 80 to 100% and a specificity of 88 to 96% for liver cyst infection, however it is less sensitive for lung (50-56%) or other organ involvement (25 to 56%) (4). Assays are under development using recombinant echinococcus antigens, which may provide better specificity for diagnosis.

Ultrasound is one of the most important diagnostic tools in the differential diagnosis of adnexial cysts. Many studies have been made about the ultrasonographic appearance of hydatid cysts (4-5). First, a simple hypoechogenic pattern is observed in the cyst in the early stage of the disease. When the host's immune mechanism begins to activate and defend itself against the parasite, the ultrasound scans reveals a floating lilly and then a congealed water lilly sign. At the end of the illness, scattered echogenic focus is seen within the cyst (5). In our case, ultrasound scan showed the congealed *water lilly sign*, concerned that the infection could be asymptomatic over along period and the symptoms has occurred due to the mass effect of enlarging cyst in a confined place. In the previous reported pelvic hydatid cyst could not be diagnosed preoperatively by ultrasonography (3).

There are no specific symptoms of pelvic hydatid disease. It has been reported that patients with uncomplicated disease presented with vague lower abdominal pain, swelling, menstrual irregularities, infertility and pressure symptoms from neighbouring organs (3). In

countries where the disease is endemic the possibility of hydatid disease should be considered in differential diagnosis of any adnexial mass.

Surgical treatment is the preferred route of treatment in women with pelvic hydatid disease. Spillage of cyst contents contaminating the surrounding tissue must be avoided. Mebendazole and albendazole are both useful scolocidal agents, and should be used as an adjunct to surgery or in patients who are unsuitable for surgery (3).

References

- 1-** Karaoglanoglu N, Kurkcuoglu IC, Gorguner M, Eroglu A, Turkyilmaz A. Giant hydatid lung cysts. Eur J Cardiothorac Surg, 2001;19:914-917.
- 2-** Sallami S, Nouria Y, Kallel Y, Gargouri M, Horchani A. Intravesical hydatid cyst. Urology 2005; 66:1110.
- 3-** Terek MC, Ayan C, Ulukus M et al. Primary pelvic hydatid cyst. Arch Gynecol Obstet, 2000 ;264(2):93-6.
- 4-** Diaz- Recasens J, Garcia Enguidanos A, Munoz I, Sainz de la Cuesta R. Ultrasonographic appearance of an echinococcus ovarian cyst. Obstet Gynecol, 1998;91:841-842.
- 5-** Grover SB, Ratan SK. Serial sonographic changes in hydatid cyst following medical therapy. Indian Pediatrics, 1999; 36: 949-52.

Corresponding Address:

Dr. Fatma Ferda Verit
Harran University, School of Medicine
Tıp Fakültesi Hastanesi
Tr-63100 Sanliurfa TURKEY

Tel: +90 414 314 1170

Fax: +90 414 315 1181

E-mail: averit@harran.edu.tr