

Primary Pelvic Cyst Hydatid

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Cyst Hydatid is a human infection caused by Echinococcus larva. The cyst of echinococcus can be seen in every organ and part of the body. Although it is mostly seen in the liver (60%) and in the lungs (15%), it is rarely seen in the genital track.

The patient who suffered from abdominal swelling, inguinal pain and anorexia was referred to our emergency polyclinic and an abdominal mass was found after the physical examination. The ultrasonographic and computerized tomographic findings suggested a giant mass which had both solid and cystic components and filled the whole pelvis. The patient was operated and diagnosed as Cyst Hydatid peroperatively. The cyst was excised surgically and the abdominal cavity was irrigated by batticon solution in order to prevent recurrences. The diagnosis was supported both by pathologically and serologically (IHA :1/2560).The patient was medically treated by Albendazole (2x2) for 6 months. No any pathologic finding was seen after postoperative medical treatment and in 2 years follow up.

Key Words: Cyst hydatid, Pelvic mass

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Introduction

Cyst Hydatid also known as echinococcus is a common parasitic disease in our country which threatens both human and animal health. This disease is a human infection caused by the larva of echinococcus. Although echinococcus is mostly seen in liver (60%) and lungs (15%), it can be seen in all parts of the body.¹

Except the secondary invasion caused by the rupture of liver cyst, cyst hydatid in the female pelvic organs is rarely seen. Cyst Hydatid formation in pelvis can be asymptomatic for a long period, it can be diagnosed because of irritation and mass findings or it can be diagnosed incidentally.²

With this case report from our clinic, we aimed to discuss how to diagnose and the difficulties that we came across in the diagnosis of an intraoperatively diagnosed primary pelvic cyst hydatid case from the points of pathology, treatment, prognosis with the help of literature.

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Case Report

A 33 year old female patient consulted to our emergency polyclinic with complaints of abdominal swelling (lasting for nearly 2 years), anorexia and inguinal pain. In physical examination a hard, fixed mass reaching to umbilicus was palpated.

Abdominal ultrasound of the patient is reported as: Multiple cystic lesions that fill the right abdominal cavity, the largest with 136x80x93 mm in size are observed. The liver is pushed superiorly. The cystic lesions in pelvis fill the whole right adnexial zone, reach the left adnexial zone and push the left ovary laterally. There are several cysts in the left ovary and the largest one is 35 mm diameter. Liver, gallbladder, pancreas and spleen are normal. Left kidney size is 150x70 mm and it's increased. There's grade 3 hydronephrosis in the left kidney.

Abdominal computed tomography is reported as: A mass that contains cystic and solid components with a size of 24x17x23 cm is observed in the pelvis. The mass fills the whole pelvis, reaches the left renal hilus, pushes the intestinal segments superolaterally and has a mass effect on the bladder and the uterus.

The laboratory findings of the patient: Tumor Markers; AFP:1.21 ng/ml CEA:0.724 ng/ml CA 125: 25.48 U/ml CA 15-3:16.20 U/ml CA 19-9: 9.19 U/ml Liver enzymes and other biochemical parameters are normal. β -HCG is negative, WBC:12100/ μ L HCT:18% PLT:529000/ μ L

The patient was operated with prediagnosis of adnexial mass after infusion of 4 U erythrocyte suspensions. In exploration uterus was in normal size, pushed laterally to left by the mass and approximately 25X20 cm multiloculated irregular cystic mass was detected. The left ovary and the salping were torsioned, turning twice around themselves. No necrosis or hemorrhage was detected. The mass adjacent to the right of uterus, filled the whole abdomen and expanded from right abdominal wall to periton and from posteroinferior to retroperitoneal Douglas region (Figure1). Nearly 15 cm portion of the mass was excised to be sent to pathologic frozen examination. On the surface of mass, daughter cysts germinative membranes were seen (Figure 2). The result of frozen examination was "Hydatic Cyst". Content of cyst was aspirated. It was excised from the peripheric tissues by blunt and sharp dissection. The abdominal cavity and the cyst cavity were washed with diluted batticon. The right ovary was on the mass and it was atrophied. Right salpingo-oophorectomy was done. There were serious hydrosalpinx and torsion in the left tuba. Left salpingectomy was done. Left ovary was polycystic. Wedge resection was applied to left ovary. Right ureter was dissected. There were bilateral hydronephrosis prominently in right. Urology consultation was requested. Reconsultation with postoperative scintigraphy was suggested by urology. The abdominal cavity was examined intraoperatively by the general surgery again but no other cyst hydatic was detected. The cyst in Douglas was aspirated, washed with batticon. Because of dense adhesions over 1/3 of cyst's surface it couldn't be dissected and left at Douglas. One soft drain was placed at the site of remaining cyst and the abdomen was closed anatomically.

The result of serologic test (IHA) which was demanded postoperatively for cyst hydatic was 1/2560. The patient was proposed to use 200 mg albendazole tablets 2X2 for 6 months postoperatively and discharged with recommendations of monthly liver enzymes and hemogram follow ups. In one year follow up of the patient there was no pathology determined. The patient didn't come to next control appointments.



Figure 1



Figure 1-2: Kist Hidatiğin intraoperatif çekilen fotoğrafları

Discussion

Echinococcal cyst was firstly declared by Hipocrates to be seen in animals and human beings.³ The most common echinococcus form seen is echinococcus granulosus. Its adult form shelters in its main host which are the intestines of cats and dogs. However its egg and larva forms exist in intermediate hosts which are sheep, goat, cattle, buffalo, horse and human beings in the form of hydatic cyst. The adult forms produce infective eggs by faeces. Embryos ingested by humans come out of their eggs in the acidic environment of stomach. Larva penetrates into the intestinal wall and transports to liver by the portal vein. While 70% stays in liver, 30% escapes from hepatic filter. Most of these that escape from the hepatic filter are captured in the lungs but some part of it joins the systemic circulation and settles in end organs (such as brain, abdomen and pelvic organs). That can be asymptomatic for 10-20 years. This situation changes according to the elasticity and expanding capacity of the organs. This duration diminishes prominently if the cyst is formed after spontaneous or iatrogenic rupture of the primary cyst.^{4,5}

The incidence of the pelvic echinococcal cyst is 0,2%-0,9%,^{6,7} 80% of pelvic cases includes the genital tract Ovaries are the most common localization and the uterus is the second place where they are seen mostly.⁶ These cases are generally secondary to the rupture of other cysts.⁸ But primary pelvic cyst hydatic is also described.^{1,2,8} The recurrence of primary cyst hydatic postoperatively is 8%-22% while most of these are in first 2 years time interval.⁴ We accepted our case as primary pelvic cyst haydatic because there were no lesions in other organs.

Cyst hydatic doesn't have its own specific symptoms. The diagnosis is up to the extent and complications of the cyst. Sometimes it can be discovered incidentally in the ultrasonographic examination. In series of Rahman, uncomplicated patients referred with lower abdominal pain, swelling, menstrual

irregularity, infertility and mass findings upon other organs. However complicated patients were diagnosed with symptoms of acute abdomen and vomiting.⁸ USG, CT serologic tests are contributory to the diagnosis of pelvic echinococcus. Our case had complaints of lower abdominal pain and swelling in abdomen. Postoperative IHA result was determined as 1/2560. In the USG exam a cystic mass originating from adnex was established in the first plan. Postoperative CT films were reevaluated in our radiology department and the detected cyst was declared to be cyst hydatid.

Main principle of treatment in pelvic cyst hydatid is surgery. The extent of surgery changes depending on the dimensions and the localization of the cyst, age of the patient and involvement of other organs. It's not difficult to excise multiple cysts which are adherent to adjacent tissues. In attentive manoeuvres which are done during the surgery are responsible for frequent recurrences. Contamination of surgical area by the content of the cyst should be avoided. The surgical area should be covered with scolex killer saturated surgical gauzes. 20% NaCl solution can be used for this aim but povidon-iodine solution is safer and more effective alternative. In recent years there are publications which recommend not only fine needle aspiration but also percutaneous drainage and sclerotherapy.^{9,10} In our case the abdominal cavity and the interior of the cyst was washed with diluted batticon solution.

Antihelminthic drugs such as mebendazol, albendazol or praziquante are indicated postoperatively and to patients whom refuse surgery or when surgery cannot be performed. Wilson reported 29% complete cure, 55%-79% recovery with mebendazol, 30% complete cure and more than 50% recovery with albendazol.¹¹

We started to our treatment to our patient with 200 mg albendazol tablet 2X2 daily for 6 months.

As a result, cystic lesions in the ovaries are common in young women and generally this lesions are benigns. But especially in endemic areas the suspicion of the cyst hydatid should always arise and should always come to mind in differential diagnosis of cystic pathologies in ovaries.

Primer Pelvik Kist Hidatik

Kist hidatik (echinococcosis) tüm organ ve vücut bölgelerinde görülmesine karşılık, kadın genital sisteminde çok nadir görülür.

Karında şişlik, kasık ağrısı, iştahsızlık şikayeti ile acil polikliniğimize başvuran hastada batında kitle saptandı. Batın tomo-

grafisinde ve ultrasonografisinde pelvisin tamamını dolduran, solid ve kistik komponentler içeren kitle rapor edildi. Adneksiyal kitle ön tanısı ile opere edilen hastada peroperatuar Kist Hidatik tanısı konuldu. Kist cerrahi olarak çıkartıldı ve batın rekürrenslerini önlemek için batticon solüsyonu ile yıkandı. Patoloji ve seroloji (IHA: 1/2560) ile kist hidatik olduğu doğrulandı. Hastaya Albendazol 200mg'lık tabletlerden altı ay kullanılmak üzere 2x2 başlandı. Postoperatif uygulanan medikal tedavi sonrası ve 2 yıllık takip boyunca herhangi bir patolojik bulguya rastlanmadı.

Anahtar kelimeler: Kist hidatik, Pelvik kitle

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