

Primary Hydatid Cyst of Ovary and Peritoneum: A Case Report

Over ve Peritonun Primer Kist Hidatik Olgusu

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ABSTRACT

Echinococcus granulosus is considered to be the major cause of human hydatid cysts. *E. granulosus* mainly affects the liver with the percent of 63. We discussed a patient with right ovarian solid cyst of approximately 6-7 cm diameter solid like bone with smooth surface, in our case report. The histopathological assessment of the cyst made the diagnosis of cyst hydatid of the ovary and peritoneum of the abdomen. Hydatid cyst of the ovary is rarely seen and have been reported from endemic areas and should be included in the differential diagnosis of multicystic ovarian lesions such as honeycomb like appearance or ovarian cysts with hyperechogenic capsule if the patient comes from an endemic area and has had cysts elsewhere in the body.

Keywords: *Echinococcus granulosus*, hydatid cyst, ovarian cyst

ÖZET

Echinococcus granulosus insanda kist hidatiğin birincil nedenidir. *E.granulosus* özellikle %63 oranıyla karaciğeri etkiler. Olgu sunumumuzda sağ ovaryan yaklaşık 6-7 cm ebatında kemik kadar sert ve düzgün yüzeyle over kisti olgusunu tartıştık. Over ve periton kaynaklı olan kistik histopatolojik değerlendirme neticesi primer kist hidatik olması vakayı ender kılmaktadır. Overin ve peritonun primer kist hidatik olgusu nadiren gözlenmektedir ve genellikle kist hidatiğin endemik olarak saptandığı bölgelerde izlenmektedir ve bu bölgelerde yaşayan hastalarda balpeteği şeklinde multistik gözlenen over kistlerinde veya hiperekojen kapsüllü kistlerde ayırıcı tanıda akılda bulundurulmalıdır ve vücut taraması yapılmalıdır.

Anahtar Kelimeler: *Echinococcus granulosus*, kist hidatik, over kisti

INTRODUCTION

Echinococcus granulosus is considered to be the major cause of human hydatid cysts. This infection is more common in countries where people keep cattle, sheep, and dogs near their living places [1]. Humans play the role of accidental intermediate hosts. Usually the duration of cyst formation from the ingestion of the eggs by a host until symptomatic stage of the disease is 10-20 years [1].

E. granulosus adult tapeworms are present in the intestines of canines such as dog, fox and wolf [2]. The adult tapeworms produce infectious eggs that pass in feces. 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]. *E.granulosus* mainly affects the liver with the percent of 63 [1]. Recurrence of the

disease after surgery for primary hydatid cysts reaches 22% by 30 months [4].

Case

A 61-year-old (Gravida 4, Para 4) woman presented with incidentally detected adnexial mass when she underwent MR examination for lumbar pain. She described menopause at 50 years old, and not having postmenopausal bleeding nor adnexial pain. She had had an appendectomy, 20 years before. After the detection of adnexial mass seen on MR examination, she admitted to gynaecology department for further investigation. On transvaginal ultrasound 80 to 60 mm solid hyperechogenic capsulated anechoic cystic mass revealed at the locus of right adnex, probably sourced of the right ovary. On bimanual examination, the same right adnexial cystic mass was palpated. The preoperative tumor markers are: Ca-125=5.69 U/ml [N=0-30], Ca 19-9=21.1 U/ml [N=0-14], CEA=2.02 ng/ml [N=0-10]. The other biochemical parameters were within normal ranges.

After preoperative preparation fulfilled, hysterectomy and bilateral salpingo-oophorectomy was planned, and intra-operative frozen section to be taken since the probability of malignancy. The abdomen was opened by a midline incision. A right ovarian solid cyst of approximately 6-7 cm diameter hard like bone and white with smooth surface was identified. The capsule was intact. The left ovary, fallopian tubes and uterus were normal. Frozen section of the cyst was investigated and a mass with high amounts of calcium assessed, no malignancy was detected by the pathology department. And two other cysts with the diameter of 8x6x5 and 7x5x4 cm were detected at Douglas and extracted after dissection carefully made from intestinal organs. The hysterectomy and bilateral salpingo-oophorectomy was completed in regular way and the patient was closed without incident. The histopathological assessment of the cyst made the diagnosis as cyst hydatid of the ovary and peritoneum of the abdomen. She didn't have a history of cyst hydatid of liver or lungs. This is the primary involvement of ovary and peritoneum with the *E. granulosus*. After the operation Albendazol treatment of 200 mg for three weeks with the dosage of 2x2 / day has been started.

DISCUSSION

Hydatid cyst of the ovary is rarely seen case and have been reported from endemic areas such as Saudi Arabia [5], Ethiopia [6], India [7], Iran [8] and Turkey [9]. Generally, these cases

discussed low incidence of primary involvement of the ovary as a site of hydatid cyst formation. Usually secondary involvement of the pelvic organs is seen, and the primary involvement is very rare as seen in our case. With the knowledge of these data it has been suggested that Echinococcal cysts should be included in the differential diagnosis of multicystic ovarian lesions such as honeycomb like appearance or ovarian cysts with hyperechogenic capsule if the patient comes from an endemic area and has had cysts elsewhere in the body [10].

In conclusion, hydatid cyst of the ovary and peritoneum is rarely seen case and should be included in the differential diagnosis of multicystic ovarian lesions such as honeycomb like appearance or ovarian cysts with hyperechogenic capsule if the patient comes from an endemic area and has had cysts elsewhere in the body.

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