

Solated Primary Hydatid Cyst of The Breast; Case Report

Primer İzole Meme Kist Hidatiği; Olgu Sunumu
Genel Cerrahi

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Özet

Kist hidatik *Echinococcus Granulosus* ile bulaşan bir hastalıktır. Endemik bölgelerde, özellikle hayvanlarla teması olanlarda yaygındır. Meme kist hidatiği endemik bölgelerde bile çok nadirdir. Memeye sekonder yerleşim gösterebildiği gibi, primerde yerleşimde gösterebilir. Kliniğimize memede kitle nedeniyle başvuran 66 yaşındaki kadın hastamızı sunduk.

Anahtar kelimeler: *meme, kist, echinococcus granulosus*

Abstract

Hydatid disease is an endemic anthroponosis and is commonly caused by the tapeworm *Echinococcus Granulosus*. It is endemic in sheep- and cattle-raising regions, seen mainly in Mediterranean countries including Turkey. Echinococcal involvement of the breast is extremely rare, even in endemic countries. We present a 66-year-old female patient with hydatid cyst who presented with the complaint of a mass in the right breast.

Keywords: *cyst, breast, echinococcosis granulosus*

Introduction

Human hydatid cyst or cystic echinococcosis is a life-threatening zoonotic disease that occurs in most countries worldwide and is recognized as a major public health problem¹. It particularly affects developing countries. The prevalence of hydatid disease is estimated to be 0.005%; the incidence of the disease is 2-12 per 100,000 persons. In Turkey, the incidence of hydatid cysts is 14 per 100 persons². Hydatid cysts mainly affect the liver (67%). The route of dissemination is most commonly through blood circulation and secondly through the lymphatic duct. Hydatid cysts may grow in almost every organ of the body, with the liver and lung being the most frequently targeted organs. However, the cyst tends to appear in different and sometimes unusual body sites. A hydatid cyst in the breast is very rare; reported incidence in the breast is 0.27%. Patients present with unilateral, painless, slowly growing lumps in the breast mimicking breast neoplasm clinically and they are most common in women between the ages of 30 and 50³. In most cases they are discovered accidentally during a routine ultrasound or mammography. Surgical approaches remain the gold standard for diagnosis and treatment. We present a 66-year-old female patient with a hydatid cyst who presented with the complaint of a mass in the right breast.

Case Report

A 66-year-old female patient was admitted to our outpatient clinic due to a mass in her right breast for about one year. Breast examination by palpation revealed one discrete mass in the upper outer quadrant of the right breast, measuring approximately 3x2 cm, mobile and well circumscribed.

The mammogram revealed a large, smooth-walled, well-defined opacity in the upper outer quadrant of the right breast, measuring 32x25 mm (Figure-1).

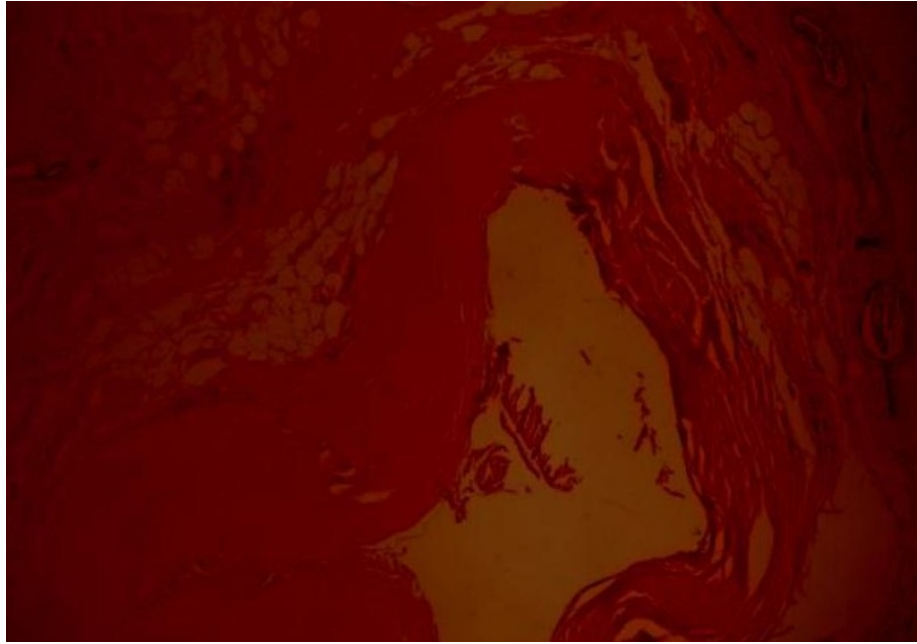


Figure 4

Shows avascular, eosinophilic, refractile, chitinous and fibrosis layer of cyst wall and the breast parenchyma, with in pieces of the germinal membrane. H&E 4*

After two years, abdomen and thorax computed tomography (CT) and mammography were performed and no cyst was detected. We considered this case as an isolated primary hydatid cyst of the breast.

Following the operation, an IHA test conducted for echinococcus was negative. Thorax and abdomen BT revealed no other lesion consistent with the hydatid cyst.

Case Discussion

Hydatid cyst of the breast is seen very rarely even in the regions where the disease is endemic. Parasites usually spread to the visceral organs via the blood or lymphatic system. Rupture of a hydatid cyst of the liver is secondary to blunt abdominal trauma or iatrogenic trauma and can lead to the spread of contents to the secondary biliary tract and afterwards to the breast^{4,5}.

The diagnosis of breast hydatid cyst is made using imaging techniques such as USG, CT, or magnetic resonance imaging (MRI), combined with case history. Serology tests can be used in addition. Mammography shows a homogeneous smooth circumscribed oval lesion. The imaging features of hydatid cyst are nonspecific. The lesion is usually seen as a circumscribed mass. The differential diagnosis includes cyst, fibroadenoma, phyllodes tumor, and circumscribed carcinoma. USG of the breast shows a well-defined, multicystic mass with layering low level internal echoes. It is difficult to detect the mass by USG or mammogram. In our case, the diagnosis could not be made by USG or mammogram⁶.

In MRI, the capsular wall of the mass was smoothed and moderately thickened⁴. There were internally scattered, mostly circumferential oriented small loculations separated by thin septations. According to the indirect hemagglutination test results, hydatid cyst of the liver is positive for over 80% but for a typical localization of cyst percentages can be lower; herein the test result for hydatid cyst of the breast was negative. Fine needle aspiration biopsy can be performed to diagnose hydatid cyst⁷. In our case, the aspiration biopsy did not detect

cysts. Open surgical procedures such as cystectomy are the basis of the treatment of hydatid cyst of the breast⁶. The number of eosinophils in the peripheral blood can increase about half with hydatid cysts, but in this case the eosinophil count was within the normal range⁸.

Conclusion

Hydatid cyst of the breast is very uncommon. It is very challenging to differentiate it from other tumoral lesions of the breast. However, it should be included in the differential diagnosis of breast lumps for patients living in endemic areas. Surgical approaches are the main treatment and total cystectomy should be performed.

Informed Consent

From the Patient

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