Isolated Hydatid Cyst of the Breast—a Case Report

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Introduction

Hydatid disease is caused by larval form of *Echinococcus granulosus*, encountered endemically in sheep breeding communities. Humans are accidental intermediate host of this organism. 70 % of the cases are detected in the liver, 20 % in the lung and rest in other organs [1]. Breast involvement is rare accounting for only 0.27 % of the localization [2]. The diagnosis of hydatid disease is based on clinical assessment, serology, ultrasonography (USG) and FNAC.

We report a case of 42 yrs old female who presented as a case of breast lump, which was later confirmed to be a case of hydatid cyst of the breast. Hydatid disease is rare in this part of the country, and hydatid disease of the breast is even rarer.

Case Report

A 42 years old female patient was admitted with the complaint of lump left breast for 1 year and pain for 2 months. On examination the right breast was normal. There as 4 × 4 cm, non tender firm, mobile lump with regular borders smooth surface, in upper outer quadrant of the left breast. Both the nipples were normal. She had no axillary or supra-clavicular lymphadenopathy. A posteroanterior radiograph of the chest was normal. On blood examination total

leukocyte count was 5000 cells/ml and eosinophils 1 %. Abdominal ultrasound was normal.

FNAC of the breast lump was done as a part of evaluation of breast lump and 2 ml of clear fluid was obtained. Microscopic examination of aspirated fluid showed presence of hooklets. ELISA for *Echinococcus Granulosus* was positive. A diagnosis of isolated hydatid cyst of left breast was made as a thorough evaluation didn't showed any evidence of hydatid cyst in any other part of the body. The patient was taken up for surgery and the lump was excised in toto after instilling 3 % hypertonic saline (Fig. 1). On sectioning the lump, a fluid filled cystic lesion with hydatid membranes was seen (Fig. 2). Postoperatively patient had an uneventful recovery. She was discharged in good general condition and is on regular follow up. Histopathological examination confirmed the diagnosis of hydatid cyst of the breast.

Discussion

Hydatid disease of the breast is rare [3] Classically the patient with hydatid disease of the breast present with a long history of lump, which should differentiated from fibroadenoma in young and carcinoma in older patients. Definitive diagnosis is classically confirmed by demonstration of brood capsules, scolices and hooklets [4]. As a routine, aspiration is avoided in patients with a clinical suspicion of hydatid disease because of the possibility of hypersensitivity reaction [5]. However, it is not always true [6]. Surgical excision remains the treatment of choice and gives good result if performed meticulously avoiding spillage of the cyst contents, as was done in the present case. Scolicidal solution such as hypertonic saline should be injected into the cyst and surrounding area protected by packs soaked in scolocidal solution.

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Fig. 1 Per operative photograph showing hydatid cyst being injected with 3 % Hypertonic Saline

Fig. 2 Cut open surgical specimen of hydatid cyst of the breast showing hydatid membrane

Triple assessment [7], which includes clinical assessment, USG and FNAC is commonly used for the diagnosis of breast lumps. In the present case clinical assessment and FNAC was diagnostic. USG further reinforces the diagnosis preoperatively. More recently serological tests such as ELISA for *Echinococcus* is increasingly used for preoperative diagnosis of hydatid disease.

Hydatid disease of the breast, though rare, should be kept in the differential diagnosis of breast lumps in all the age groups. Watery clear fluid aspirated from a breast mass during FNAC should raise the suspicion of the hydatid disease of the breast. Cytological and serological tests should be done for its confirmation, as was done in the present case.

Conclusion

It is thus concluded that isolated hydatid cyst of the breast though rare should also be kept in the differential diagnosis of breast lump and proper evaluation should be done to rule out the same preoperatively.

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