

Primary hydatid disease of breast causing diagnostic difficulty; A rare case report

TANISAL GÜÇLÜĞE SEBEP OLAN NADİR BİR PRİMER MEME HİDATİK KİST OLGUSU.

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J Surg Arts (Cer San D), 2017(2): 41-43.

ABSTRACT

Primary hydatid disease of breast is a rare presentation but should be considered as a potentially fatal disease. Usual presentation is a painless progressive lump in breast simulating other benign breast disease. Preoperative FNAC may help but diagnosis is usually delayed upto exploration. Complete cystectomy offers cure in absence of systemic dissemination. We report such a case of primary breast involvement causing diagnostic difficulty.

Key words: Hydatid cyst, breast, diagnosis, treatment..

ÖZET

Meme hidatik kisti nadir görülen ve mortalite potansiyeli olan bir hastalıktır. Hastalar genellikle memede ağrısız büyüyen kitle ile müracaat ederler. Preoperatif İİAB tanıya yardımcı olmakla beraber tedaviyi geciktirici bir işlemdir. Hastalığın sistemik olmadığı durumlarda kitlenin total eksizyonu kür sağlayıcıdır. Burada tanısal güçlüklerle karşılaşılan bir meme hidatik kist olgusu sunulmuştur.

Anahtar kelimeler: Hidatik kist, meme, tanı, tedavi.

INTRODUCTION

Hydatid disease is a paracytic disease common in cattle grazing areas and is caused by caestode tapeworm *Echinococcus granulosus*. The disease manifests by development of cysts commonly in the liver and lungs. Breast is a rare site for primary hydatid cyst constituting only 0.27% of the localization. We report such a presentation in a middle aged lady without previous hepatic or systemic manifestation. Primary hydatid disease is relatively uncommon and offers diagnostic and therapeutic challenge.

Case

A 45 years old female patient presented to the General Surgical department of Calcutta National

Medical College & Hospital with a progressively increasing painless lump in the lower and outer quadrant her left breast since last ten months. There was an episode of serous discharge from the nipple one month back. examination revealed a 6 cm x 6 cm firm, mobile mass with regular borders in the lower and outer quadrant of left breast without any axillary lymphadenopathy. The rest of the physical examinations were unremarkable. Clinical examination was suggestive of benign fibrocystic breast disease. On fine needle aspiration smear shows cytological features of few inflammatory cells and some ductal epithelial cells. Smears from the nipple discharge show some ductal epithelial cells arranged in papillary configuration. Overall cytological features were suggestive of an

infected cystic lesion of breast with intraductal papilloma. Ultrasonography of breast revealed multiple cystic lesion in left breast with largest one measuring 3.38 cm x 3.45 cm with echogenic material with internal septation. Mammography revealed some degree of retraction of nipple with a smooth, homogenous, circumscribed lesion in the left breast. Hematological examination is essentially normal. A decision was made for surgical excision of the lump. On exploration it was found to be a multiloculated cystic lesion with dense surrounding fibrous tissue. The mass was completely excised and on sectioning laminated membrane was seen. The cyst contained yellowish fluid. Overall the features were suggestive of hydatid cyst. The wound was irrigated with 3% saline and closed. Postoperative recovery was uneventful without any skin infection. Histological examination confirmed the diagnosis of hydatid disease. Postoperative abdominal ultrasonography and chest radiograph did not reveal any cystic lesion.

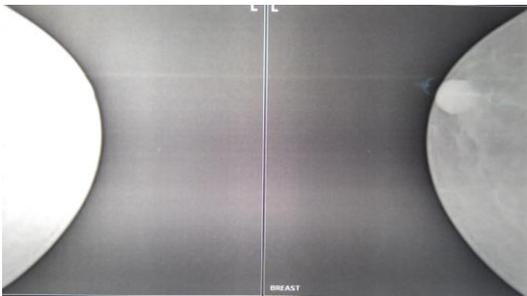


Figure 1: Mammography showing smooth homogenous lesion in left breast.



Figure 2: Excision of cyst from the left breast.



Figure 3: Hydatid cyst after excision.

DISCUSSION

Breast can be affected by hydatid disease either as a primary site or as a part of disseminated hydatid disease. However only 0.27% of the hydatid cyst localizes in breast (2). In spite of its rare presentation primary hydatid cyst should be considered as a differential diagnosis in painless breast lump specially in endemic areas. It usually present as painless progressively increasing breast lump in middle aged women though wide range of age has been reported to be affected (3,4). No specific diagnostic modality is available with most of the cases diagnosed at the time of exploration showing laminated membrane or by postoperative histopathological report (5,6). Preoperatively benign breast disease like fibroadenoma, phylloids tumour, cysts or rarely breast carcinoma may be taken into consideration as differential diagnosis (1). FNAC can be done safely without any reported evidence of anaphylactic reactions (8) and may be considered diagnostic when it shows characteristic hooklets (7) or laminated membrane (3). Among the imaging modalities mammography is not of much help and only shows nonspecific, homogenous, smooth, circumscribed lesions (3,6,9). Vega and others are first to report the characteristic ring shaped structure in the mass in an accidentally performed overpenetrated view. According to them this structure is due to the difference in density between the wall and contents of the daughter cysts inside the fluid-filled hydatid cyst (3). Ultrasonography shows well defined lobulated mass of heterogenous echogenicity containing multiple cystic areas (9,10). Due to the rarity of the disease the specific imaging findings are often missed and diagnosis is suspended until aspiration or surgical intervention confirms it (9). However the overpenetrating view should be considered in cases where ultrasonography or FNAC were suspicious particularly in endemic areas (1). MRI on the other hand may demonstrate the well circumscribed lesion with characteristic capsular ring enhancement. This finding may be a good supporting evidence if the possibility of breast abscess can be excluded by clinical examination which produces similar findings (11). Chest x-ray and abdominal ultrasonography must be performed to rule out the possibility of disseminated hydatid disease. Serological tests may support the diagnosis. Complete cystectomy is the only curative intervention available (5,6,10,11) followed by thorough irrigation of the wound with 3% normal saline to eliminate the possibility of accidental seeding and it does not complicate wound healing (1).

To summarize primary hydatid disease of breast is a rare entity but should be considered as a probability in painless progressive breast lumps. Preoperatively FNAC may be helpful but exploration is mostly required for specific diagnosis. Cystectomy is curative if dissemination is excluded.

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