ORIGINAL RESEARCH PAPER

Pulmonary Medicine

PECTORALIS MUSCLE TUBERCULAR ABSCESS MIMICKING AS BREAST LUMP : A CASE REPORT

KEY WORDS:

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ABSTRACT

Lump breast is one of the most ominous conditions more so were associated with axillary lymph node both for the patient and physicians. Our patient presented with lump in the upper medial quadrant region of right breast. carcinoma breast was one of the possibilities however on detailed examination and investigation it was found to be tubercular abscess of the pectoralis major muscle situated underneath the mammary gland. Tubercular abscess of pectoralis major and that too mimicking lump breast is rare, hence we report this case. Muscular Tuberculosis is also uncommon, muscle contains myoglobin which utilizes oxygen more efficiently hence leaving no oxygen for M. tuberculosis to grow which are obligatory aerobes. Tuberculous mastitis is a rare presentation of tuberculosis that has been called the 'great masquerade' due to its multifaceted presentations. Solitary breast mass is the most common clinical presentation of tuberculous mastitis and is associated with inflammatory findings in the majority of cases.

INTRODUCTION

Carcinoma breast is not an uncommon condition in females. Epidemiology of carcinoma of breast has varied presentation, like in 2020 there were 2.3 million women diagnosed with carcinoma breast and 685000 deaths globally. As end of 2020 there were 7.8 million women alive who were diagnosed with breast cancer in past 5 years. One of the most common presentations is lump breast. Screening of the breast for any lump is now a standard care after age of 40 years and after 30 in case were strong family history of carcinoma breast, ovary, prostate, and pancreas. Any condition of organ beneath the mammary gland can also pose as lump breast. Tuberculosis is a common and a major public health problem in India since long. Because of very high incidence and prevalence of pulmonary tuberculosis in India, different forms of extra-pulmonary tuberculosis are also relatively high. Breast tissue along with spleen and skeletal muscles are relatively resistant to Tuberculous infection. Tuberculous mastitis not associated with HIV infection is primarily a disease of premenopausal, parous women, but can affect adult female breast at any age. Unilateral breast involvement is more common than bilateral. Tuberculosis (TB) is a chronic granulomatous disease predominantly caused by mycobacterium tuberculosis and is one of the most widespread human infections in the world. The infection can involve any organ and shows various presentations. Breast tissue provides resistance to the survival and multiplication of tuberculous bacilli and breast involvement is a rare clinical entity, even in endemic countries (Gon et al., 2013). Tuberculous mastitis (TM) has been called the 'great masquerade' due to its multifaceted presentations (Gon et al., 2013). The non-specific clinical and imaging characteristics and lack of familiarity of clinicians with this entity have led to increased rates of misdiagnosis as breast cancer or pyogenic breast abscess and make it a difficult diagnosis (Madhusudhan and Gamanagatti, 2008).

TM can be due to direct inoculation of bacilli through lactiferous ducts, secondary to primary infection elsewhere in the body, or rarely due to direct extension from the chest wall. Tissue involvement in the breast presents with various changes like focal or diffuse changes in breast architecture, solitary or multiple breast masses, abscesses, sinus tracts, skin ulcers, or skin thickening. All of these changes are reflected in mammographic and sonographic examinations.

Case Report

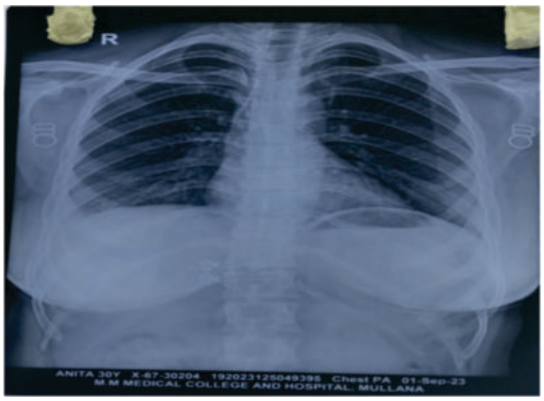
Patient a 30-year-old female cause with history of getting full course of anti -TB drugs in 2019 for pleural effusion, she remained well together but now presented with history of feverish feeling, weakness and feeling pain and some palpable mass in the right upper quadrant of Right breast.

Patient was given antibiotics and anti-inflammatory drugs but the symptoms persisted. axillary lymph node was present but no cervical lymphadenopathy.

On examination of right breast there was no nipple retraction. An irregular approximately 8cm by 4 cm tender firm partly mobile lump was palpable in upper outer and inner quadrant. Examination of left breast did not reveal any abnormality. General physical examination normal

Laboratory investigations revealed haemoglobin of 12.3 gm%, WBC count was 10200 cells/cumm with 53 lymphocytes and ESR was 130 mm. HIV non-reactive by ELISA. Sputum for acid fast bacilli was negative.

X-ray chest s/o right CP angle blunting with increased BV markings.

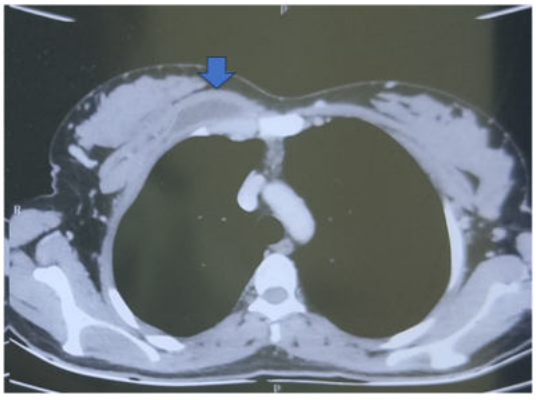


X ray chest s/o right sided cp angle blunting

USG local breast swelling done s/o well defined thick walled collection in right pectoralis major muscle measuring approx. 9cm by 1.2 cm along the rib erosion.there is also incidental finding of well-defined hypoechoic lesion measuring 4.6mm x 2.8mm seen in right outer lower quadrant

CECT chest:
Mediastinal window image showing fluid collection in right sided pectoralis muscle.

FNAC:
FNAC from right breast mass done and sample was sent for CBNAAT which was positive for TB (MTB detected with rifampicin resistance not detected).



Arrow showing Abscess in right pectoralis muscle beneath the breast tissue

Patient was started on ATT under NTEP protocol according to weight band. in between the patient presented with oozing of pus and sinus formation treatment sinus resolved with continuation of ATT and pus c/s was sterile and pus for AFB was negative for acid fast bacilli.

DISCUSSION

Our patient 30-year-old female, suffered from tubercular pleural effusion once 4 years back was presented now with swelling on right side in upper part of breast region with no signs of inflammation. Axilla revealed gland of size 4mm Possibility of Which could have been breast lump can be benign or malignant. which is most common in young female compared to tubercular mastitis which is the rare entity. as carcinoma and tuberculosis shares some common symptoms and signs like loss of weight, loss of appetite along with axillary lymphadenopathy especially in case of breast carcinoma and mobile nature of lump as in case of fibroadenoma of breast. And tender lump in case of fibrocystic breast lump. So, in our case there was strong suspicious of breast carcinoma or fibrocystic breast lump but FNAC from lump done which was suggestive of tubercular granulomatous lesion and CBNAAT positive for MTB and patient was timely diagnosed and started on ATT. Swelling in the mammary region which later on burst to lead discharging pus and subsequently sinus formation, pus did not reveal to any gram positive/negative organism, AFB positivity or malignant cells. AFB staining and CBNAAT was also negative, patient was continuing on ATT, which lead to healing of sinus. Swelling and discharging sinus can sometime be observed in patient of ruptured empyema necessitans, hence in our patient it was ruled out by normal x-ray and USG thorax. patient responded very well and there was increased in weight and appetite along with regression of breast swelling. So, we hereby present a rare case of TB pectoralis muscle which mimicking breast lump.

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