SECONDARY TUBERCULOSIS OF BREAST: CASE REPORT
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Abstract:
Breast tuberculosis is a very rare clinical entity, more common in tuberculosis endemic regions. It can be Primary tuberculosis of breast or Secondary tuberculosis. In this case report we report a case of secondary tuberculosis of breast presented with painless breast lump with a discharging sinus. The diagnostic workup and therapeutic approach is discussed and on follow up of patient after post anti tubercular therapy patient did not report any complications.

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INTRODUCTION:
The breast tuberculosis was firstly described in 1829 by Sir Astley Cooper as the “scrofulous swelling in the bosom of young women.” The prevalence in developing countries is around 3% of all surgically treated breast disorders [1]. It is most commonly caused by mycobacterium tuberculosis. It is classified as Either Primary breast tuberculosis if there is no source of primary infection present or secondary tuberculosis if there is any foci of tuberculous infection are present i.e. infected ribs, lymph nodes or pulmonary tuberculosis. It mainly present as a Painless lump in central or upper outer quadrant of breast with or without discharging sinuses. Clinically it is difficult to diagnose and differentiate between breast carcinoma. The diagnosis can be easily made by breast biopsy. The treatment involves anti tubercular (ATT) chemotherapy.

CASE REPORT:
A 35 year old woman from Hyderabad district of Sindh Pakistan presented with right breast lump since two months, in outpatient department of surgery at Isra University Hospital Hyderabad. Her past medical history, past surgical history and family history was unremarkable. On physical examination there was a an area of erythma situated at 9 o’clock position around areola of right breast, and a discharging sinus with yellow color fluid present at 6 o’clock position around areola, there was no retraction of nipple and there was no nipple discharge, and there was a breast lump present which was around 3 x 3 size which was not fixed to skin but was hard in consistency. The opposite left breast on examination seemed normal. Systemic examination was normal, all other lab reports were normal except ESR which was raised to 30 mm/Hr. subsequently an ultrasound of the breast was requested, ultrasonography report showed a large hypo echoic mass with irregular margins in right lower quadrant of breast. The breast mass on ultrasound measured 3.2 x 2.5 cm in depth and width. Sinus tract measures 1.4 x 1.1 cm. The mass was infiltrating the overlying breast parenchyma, subcutaneous tissues and skin forming a sinus tract. Two large lymph nodes were seen in right axilla, one measured about 1.0 x 2.9 cm and other was about 1.0 x 2.0 cm. After that based upon ultrasound findings a biopsy of right breast was requested to confirm the diagnosis. Biopsy was performed which showed that the lump in breast is having caseating granuloma along with epitheliod cells, suggestive of tuberculosis of breast.

Histopathology report of the right breast was as follows:
Specimen of right breast lump taken by fine needle aspiration: reveals moderately inflammatory smears comprising of lymphocytes and tangible body macrophages along with collections of histiocytes cells. Conclusion the features are most likely suggestive of granulomatous inflammation consistent with TB.

After all workup, the treatment was started with antituberculous drug therapy (Myrin-P- forte 4 Tabs. Per oral daily before breakfast, pyridoxine Tab. 25 mg) on follow up patient reported that pain has subsided, discharge from sinus has decreased, the overlying erythematous skin changes decreased (Figure 01). All labs were repeated again, LFTs were within normal limits, ESR level decreased from 30 mm/hr to 11 mm/hr. patient did not reported any treatment associated complications except mild constipation, for which dufelex syrup was prescribed.

FIGURE 1: TREATMENT RESPONSE IN PATIENT WITH BREAST TUBERCULOSIS
DISCUSSION:
Mammary tuberculosis is very much uncommon due to resistance to multiplication and survival for tubercle bacillus [2, 3] According to Mckeown and Wilkinson, the tuberculosis of breast tuberculosis was categorized in various types as [4] acute military tubercular mastitis, sclerosing tubercular mastitis, tubercular mastitis, Tuberculous mastitis obliterans and nodular tubercular mastitis. Diagnosis of TB breast is made by mantoux test, mycobacterial culture, mammography, nucleic acid amplification tests, fine needle aspiration cytology & histopathology [5-7]. The differential diagnosis can be breast malignancy, plasma cell mastitis, periareolar abscess and fatty necrosis [8]

The medical management for tuberculosis of breast includes traditional anti tubercular therapy that have nice clinical response while in case of poor response the surgical intervention as excision of residual lumps or cold abscesses drainage or mastectomy can be considered in extensive and advance disease have huge painful mass with ulcerations and involve the whole breast [8].

CONCLUSION:
Breast tuberculosis should be kept in differential diagnosis in every patient who is from TB endemic area presents with painless breast lump with discharging sinus. Diagnosis should not be made until a pathology report excludes TB. In suspicious cases a trial of Anti tubercular therapy should be considered.

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