CASE REPORT

Subareolar Tubercular Abscess - A Rare Case Report

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Abstract:

Although many people suffer from tuberculosis worldwide, mammary tuberculosis is an extremely rare condition. It constitutes about 3-4.5% of breast diseases in developing countries. *Case report:* A 35 year old female presented with left breast lump since 15 -20 days. On examination, lump was measuring 3x4 cm, firm in consistency and adhered to areola. Fine Needle Aspiration Cytology (FNAC) was performed under aseptic conditions and on microscopy, aspirate from left breast lump showed dense acute inflammatory cells, giant cells, macrophages, many scattered squamous cells, few anucleated squames, occasional ductal epithelial cells, many degenerated cells and RBC's. Ziehl- Neelsen (Z.N.) stain preparation was positive for Acid Fast Bacilli (AFB). FNAC from breast lesion is a simple and reliable diagnostic tool for breast tuberculosis with further confirmation by Z.N. stain for AFB.

Key words: Acid Fast Bacilli, Breast, Tuberculosis

Introduction:

Tuberculosis of breast is an extremely rare disease. It was discovered for the first time by Cooper in 1829. Breast tuberculosis is a rare clinical entity with incidence ranging from 0.1% in developed countries to 3-4% in endemic regions like India. It constitutes about 3-4.5% of breast diseases in developing countries having high endemicity like India [1]. Most frequently it is seen in females in the age group of 20-40 years [2].

Case Report:

A 35 years old female presented with left breast lump since 15-20 days. On examination, lump was measuring 4x3 cm, firm in consistency and adhered to areola. Contra-lateral breast examination was normal. General physical examination was normal. There was no axillary lymphadenopathy and hepato-splenomegaly. Routine hematological investigations showed normal WBC count with raised ESR. X-Ray chest showed no foci of tuberculosis. Hence, FNAC of the breast lump was done to detect its content and cellular nature. Subsequent follow up of the patient was done after 6 months of anti-tubercular treatment, the size of the lump had reduced to 2x1.5 cm and repeat FNAC revealed negative for AFB on ZN stain. It was a primary involvement of breast with tuberculosis.

Cyto-Pathology:

FNAC was performed under aseptic conditions. On microscopy, aspirate from the left breast lump showed dense acute inflammatory cells, giant cells (Fig. 3), macrophages, many scattered squamous cells and few anucleated squames (Fig. 1 & 2). Also seen were occasional ductal epithelial cells, many degenerated

Fig. 1 - Showing Squamous cells and plenty of neutrophils (H & E 400 X View)

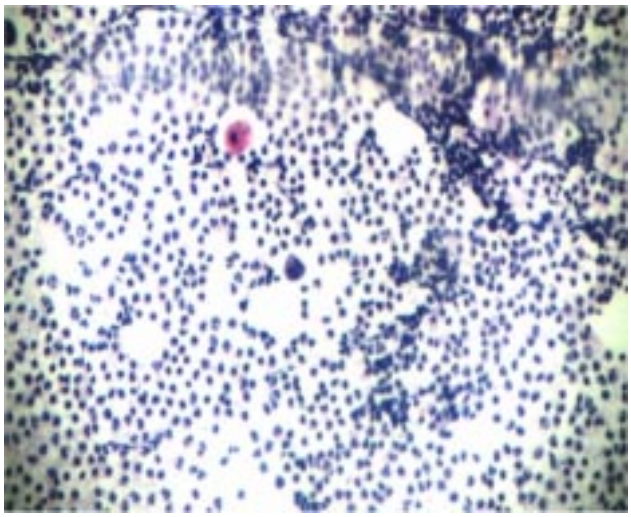


Fig. 2 - Showing Squamous cells, anucleate squame and plenty of neutrophils (H&E 400 X View)

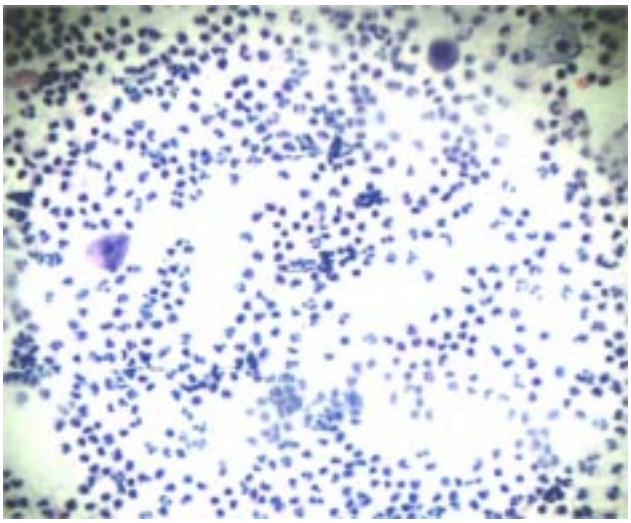


Fig. 3 - Giant cell and Neutrophils (H&E 1000X View)

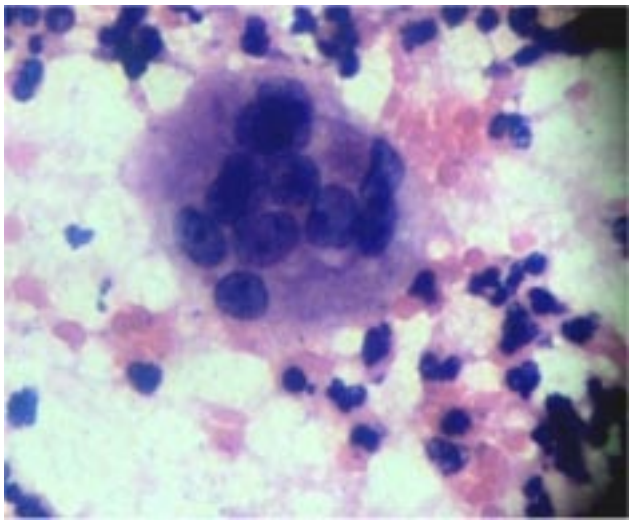
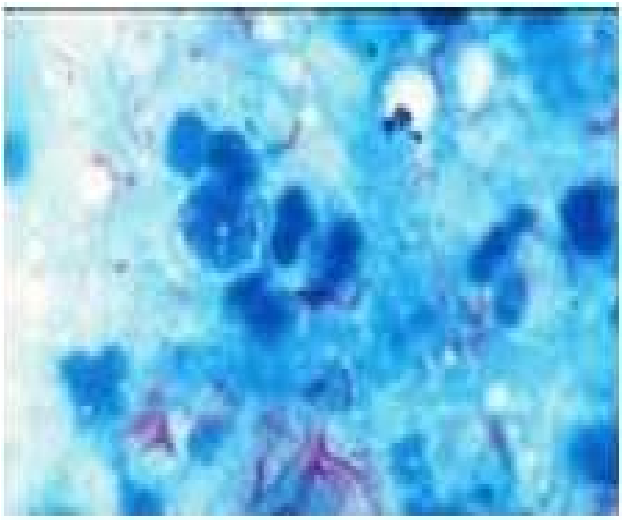


Fig. 4 - ZN Stain showing Acid Fast Bacilli (1000X View)



cells and RBCs. ZN stain preparation was positive for AcidFast Bacilli (Fig. 4).

Discussion:

Breast tuberculosis is a rare form of tuberculosis. The disease is most often overlooked and misdiagnosed as carcinoma or pyogenic abscess of breast [1]. It is rare in the western countries, incidence being less than 0.1% of breast lesions examined, although in an endemic country like India it is 3-4.5% [2]. Amongst the various risk factors considered to be associated with breast tuberculosis are multiparity, lactation, trauma and past history of suppurative mastitis. Breast tuberculosis may be primary, i.e. involving the breast as was seen in

the present case or secondary to a co-existing tuberculosis lesion elsewhere with or without axillary lymphadenopathy [3]. The breast may become infected in a variety of ways i.e. haematogenous, lymphatic, spread from contiguous structures, direct infection and ductal infection. The most accepted view though for spread of infection is through lymphatics. A new classification of breast tuberculosis was proposed by Tewari and Shukla into 3 categories (1) Nodulo-caseous tubercular mastitis (2) Disseminated/Confluent tubercular abscess, (3) Tubercular breast abscess [1]. Bilateral involvement is uncommon i.e. only in 3% cases. It commonly presents as lump in central or upper quadrant. FNAC from breast lesion continues to remain a simple and reliable diagnostic tool for 70-75% cases [1,4].

Conclusion:

In developing countries like India tuberculosis is a common endemic condition. Hence breast tuberculosis is considered in the differential diagnosis in patients presenting with breast lump. FNAC from breast lesions is a simple and reliable diagnostic tool for breast tuberculosis with further confirmation by ZN stain for AFB.

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