Letter to Editor

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A Case of Subareolar Abscess in a Male Breast: Usefulness of Fine Needle Aspiration Cytology

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Dear Editor,

Subareolar breast abscess is a rare entity encountered in males and can mimic gynaecomastia many a times. Herein, we report a case of subareolar breast abscess in a young male on Fine needle aspiration cytology (FNAC).

A 35-year-old male presented with left breast swelling for 15 days which was associated with mild pain. Local examination revealed a firm, non – tender swelling in subareolar region of left breast measuring 1.5x1 cm. [Figure 1a] Overlying skin was dry and showed discoloration. There was no history of nipple discharge, fever or trauma. Ultrasonography of the left breast highlighted a subareolar hypoechoic fibroglandular lesion measuring 18x12mm. FNAC was performed from this swelling which yielded pus-like aspirate. Multiple smears were made and stained with Papanicolaou, Giemsa and Ziehl-neelsen (ZN) stain. The left over aspirate was sent for culture studies. The smears showed degenerated inflammatory cells comprising of polymorphs, lymphocytes, macrophages and occasional multinucleated giant cells. [Figure 1b] Background showed keratinous debris and capillary fragments. [Figure 1c] Few chunks of anucleated squames were also noted. [Figure 1d] However, no ductal epithelial cells were found in the smears. ZN stain was negative for acid-fast bacilli. A diagnosis of subareolar breast abscess was made with these findings. Hormone profile showed FSH, LH, prolactin and testosterone within normal range. The microbiology report revealed *Staphylococcus aureus* on culture. The patient was treated with incision & drainage and a course of antibiotics.

Subareolar breast abscess is a rare entity in males, though it is one of the most common inflammatory lesion in females.

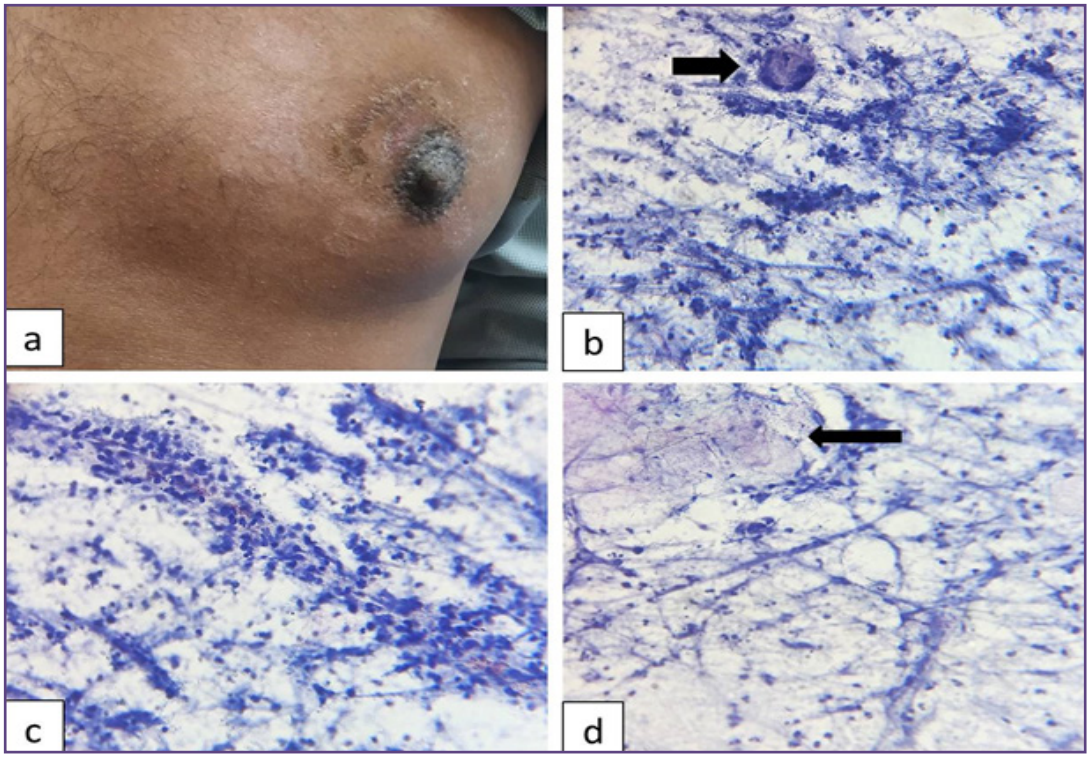

Fig. 1: (a) Left subareolar swelling with discolored overlying skin. (b) Dense mixed inflammatory infiltrate with occasional giant cell (black arrow) (Pap, x400). (c) Keratinous debris and capillary fragment (Pap, x400). (d) Occasional chunk of anucleate squames (black arrow) (Pap, x400).

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Some of the other inflammatory conditions which can be seen in males include mastitis, fat necrosis, epidermal inclusion cyst (EIC), hematoma and Mondor's disease.[1,2] Mastitis has a component of inflammation along with presence of ductal cells which usually show some degree of reactive atypia. Fat necrosis on the other hand, has a dirty background of granular debris, adipose tissue and foamy macrophages with absence of ductal cells. Cytomorphologically, EIC and subareolar breast abscess are similar, however, lesions of EIC are circumscribed and superficial.[3] In patients with hematoma, there is a history of trauma or a clotting disorder. Mondor's disease, thrombophlebitis of superficial vein arise due to massive thrombosis and a cord-like structure is felt on palpation. On cytology, the infiltrate is predominantly chronic with vascular fragments.

Subareolar abscess though rare, is the most common inflammatory pathology in the male breast.[2] The prevailing view about its pathogenesis is a pre-existing squamous metaplasia of lactiferous duct where keratin gets entrapped and on duct rupture, inflammation ensues.[4] The treatment of subareolar abscess is incision & drainage but the recurrence is common as the keratinizing epithelium remains. The ideal treatment is to excise the duct and remove the offending epithelium.[4]

The purpose of this report is to reiterate the fact that FNA being a simple, rapid and cost-effective tool helps to differentiate it from gynaecomastia and to guide surgeons for its effective treatment.

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