



Cytodiagnosis of Male Breast Carcinoma: A Rare Entity

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Abstract

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Introduction

Male breast carcinoma (MBC) is extremely rare accounting for approximately 1% of the total breast cancers diagnosed worldwide (1).

The mean age of diagnosis is 60-70 years (2).

More than 40% of males with breast carcinoma present at an advanced disease stage (3), resulting in clinically challenging management.

The low incidence and paucity of the disease entity remains a probable cause for the poorly understood etiology in cases of MBC, hence mandating the need to report this rare case.

Case Report:

A 56 years old male, resident of dehradun presented to surgical OPD with complaints of swelling in the right breast associated with nipple retraction since past 4-5 months. There was no associated pain, nipple discharge, history of trauma or any chronic usage of medicines. Patient denied loss of weight or appetite, drug abuse or excessive alcohol consumption.

Local examination of right breast revealed a painless, immobile, hard retroareolar lump measuring approximately 2.0x1.5 cm in size with retracted overlying nipple (FIG 1). On palpation of Right axilla significant lymphadenopathy was noticed. A clinical tumor stage of T4b N1 Mx was rendered.

Ultrasonography done from outside revealed an ill defined retroareolar mass in right breast with high suspicion for malignancy- BIRADS 4C. Abdominal Ultrasound was advised to rule out liver metastasis.

Fine Needle Aspiration Cytology (FNAC) was done which yielded blood tinged aspirate. On microscopic examination, highly cellular smears showed loose cell clusters and singly scattered pleomorphic cells having high N:C ratio, vesicular chromatin with prominent nucleoli in some (FIG 2). No bipolar bare oval nuclei seen in the smears examined. A diagnosis of Ductal carcinoma was rendered based on above cytological features.

We received Right Modified Radical Mastectomy (MRM) measuring 18x 12x3.5cms. Overlying elliptical skin showed retracted nipple. On serial dissection a greyish white hard retroareolar growth was identified measuring 2.0x1.5x1.0 cm (FIG 3). All surgically resected margins were inked. The closest margin was base which was 0.3 cms away from the tumor. A meticulous search yielded a total of six lymph nodes from the attached axillary tail. Microscopic examination exhibited infiltrating tumor composed of clusters of pleomorphic cells having coarse nuclear chromatin, prominent nucleoli and moderate amount of cytoplasm (FIG 4a). 1-2 mitotic figures per high power field seen. Lymphovascular emboli noted. Two out of total six axillary lymph nodes were found to be positive for malignant cells

(FIG 4b). All surgically resected margins were found to be free of tumor. Histopathological findings were concomitant with the cytological findings.

Discussion :

Breast carcinoma is a fairly dominated disease in females however, MBC is a relatively rare entity accounting for about 1% of the total breast cancers (4). The age of our patient is nearly concordant with the mean age of diagnosis.

Although the available data with respect to risk factors for MBC is sparse still few of them include radiation exposure, hyperestrogenemia due to cirrhosis, Klinefelter syndrome, BRCA mutations, first degree family history of ovarian or breast carcinoma (5). With a limitations for some factors, even a detailed history taking could not exclude the remaining ones in the present case scenario. Motivating MBC patients for genetic counselling and testing still remains a challenging task in developing country like ours specially those hailing from rural background.

The patient presented at a clinically advanced stage possibly due to lack of awareness and probable ignorance. Its high time to educate public and create consciousness regarding MBC.

Triple assessment comprising of clinical examination, histological and radiological imaging remains the core of management (6).

Invasive ductal carcinoma is the most common histological type of MBC (3) as in the present case.

Although Overall Survival of MBC patients is similar to that of females with breast cancer, however the

notion of a worse prognosis for MBC may be attributed to the tendency towards a late diagnosis (7).

Conclusion :

This case is reported with an intention to create awareness regarding the recent rising trend of incidence of male breast cancer globally. This can help in early diagnosis, prompt management and eventually help to reduce morbidity and mortality.

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FIG 1. Retracted overlying nipple (Right Breast)



FIG 2. Low power view 10X (MGG) shows highly cellular smears exhibiting loose cell clusters and singly scattered pleomorphic cells having high N:C ratio, vesicular chromatin with prominent nucleoli in some

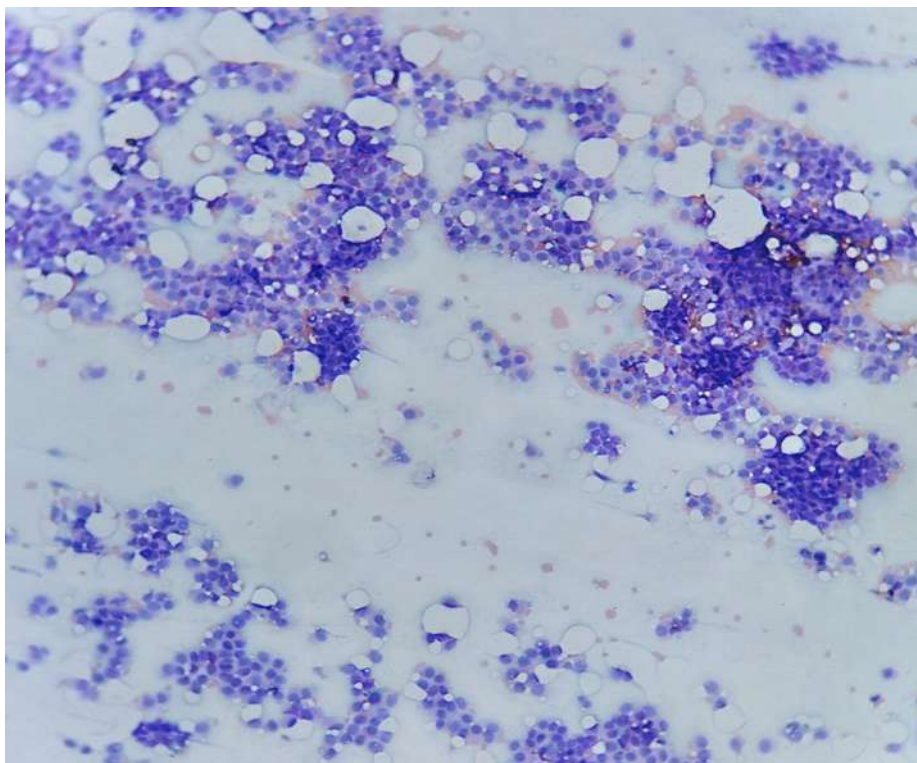


FIG 3. Right Modified Radical Mastectomy (MRM) with overlying skin showing retracted nipple and a greyish white hard retroareolar growth



**FIG 4 Low power view 10x (H and E) shows (a) infiltrating tumor composed of clusters of pleomorphic cells having coarse nuclear chromatin, prominent nucleoli and moderate amount of cytoplasm
(b) Lymph node infiltration by tumor cells**

