"Male Breast Carcinoma: A Rare Occurence"

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Abstract: Male breast carcinoma occurs very rarely in comparison to female breast carcinoma and accounts for <1% of all breast cancer patients with peak incidence at 71 yrs of age. Predisposing factors include genetic predisposition, alterations to estrogen-testosterone ratio, radiation exposure and occupational hazard. Fine needle aspiration will usually confirm the diagnosis. Treatment includes modified radical mastectomy or mastectomy with sentinel node biopsy.

Keywords: Male Breast Carcinoma, Fine needle aspiration cytology, modified radical mastectomy, chemotherapy, radiotherapy, axillary lymph nodes.

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I. Introduction

Male breast cancer is an extremely rare disease which accounts for <1% of all breast cancer patients with peak incidence at 71 yrs of age ^{1,2}. However in females the peak incidence is at the age of 52 to 72 years³. The most common presenting symptoms in male breast cancer patients are painless subareolar lump, nipple retraction and bleeding from nipple⁴. Treatment of male breast carcinoma is generally similar in men and women and it involves simple or modified radical mastectomy along with surgical assessment of the axilla.

We report one such rare case of carcinoma breast presenting in a male with axillary lymphadenopathy who was surgically managed followed by adjuvant therapy.

II. Case Report

52 yrs male presented with a palpable lump in right breast which was 7x8 cms in size and was present in the both outer and central quadrants. Areola was involved alongwith disfigurement and the mass was not fixed to the chest wall (Fig-1). Multiple small approximately =/< 1 cm sized, ipsilateral and mobile axillary lymph nodes were palpable. Abdominal examination was not suggestive of any organomegaly. Ultrasonography of the right breast demonstrated hypoechoic mass measuring 3.6x2.4x4.1 cms in right breast parenchyma in the retroareolar location with few prominent right axillary lymph nodes. Fine needle aspiration cytology of the mass showed atypical cells with moderate pleomorphism ; high N:C ratio, irregular nuclear contour, coarse chromatin with prominent nuclei and background haemorrhage. All these features were suggestive of carcinoma. Blood investigations were within normal limits. Patient underwent right mastectomy with axillary clearance under general anaesthesia {Fig-2,3(a&b)}. Histopathological examination of the breast showed clumps, nests, sheets and trabeculae of malignant cells infiltrating into the stromal tissue. The individual cells were moderate sized with increased N: C ratio. Nipple and areola were involved by the tumoiur and all the resection margins and base were free from tumour with 10 out of 13 axillary lymph nodes infiltaerated by the tumour.

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III. Discussion

Male breast carcinoma occurs very rarely in comparison to female breast carcinoma and female to male ratio is 122:1.⁵ It has peak incidence at 71 years of age and occurs later in life with higher stage, higher grade, and more estrogen receptor positive tumors in comparison to females.⁶ Predisposing factors for male breast carcinoma include genetic predisposition, alterations to estrogen-testosterone ratio, radiation exposure and occupational hazard ⁷. Sanguinetti et al in 2016 retrospectively analyzed 47 patients with a diagnosis of male breast carcinoma and found that 76% patients had solid sub areolar mass, gynecomastia (4%) and Paget's disease (2.5%)². In our study the patient presented with a palpable lump, areolar disfigurement and multiple small mobile ipsilateral axillary lymph nodes. Mammography can diagnose breast carcinoma are sub-areolar presentation , rare calcifications with usually well defined margins in contrast to females⁶. Fine needle aspiration will usually confirm the diagnosis. Treatment options include modified radical mastectomy or mastectomy with sentinel node biopsy.⁴ This is usually followed by adjuvant chemotherapy or radiothearapy or both to stop recurrence. Tamoxifen, an estrogen receptor blocker is usually given as adjuvant therapy for a longer period to avoid development of carcinoma².

References

- [1]. Barry S, Laurie L, Kelli Y et al. Carcinoma of the breast in men. Proc (Bayl Univ Med cent) 2012;25(4):367-368.
- [2]. Sanguinetti A, Lucchini R, Polistena A et al. Male breast cancer , clinical presentation, diagnosis and treatment: Twenty years of
- experience in our breast unit 2016; 20:8-11.
 [3]. Marcelo M, Mattar A, Luiz HG et al. A case report of male breast cancer in a very young patient : what is changing? World J Surg Oncol 2011;9-16.
- [4]. Sharon H.Giordano. A review of the diagnosis and management of male breast cancer. The oncologist 2005;10(7):471-479.
- [5]. Sarika J, William J.Gradishar . The breast (Fifth edition), Elsevier 2018;974-980.
- [6]. Goyal S, Goyal S, Garg GK . Male breast carcinoma and review of the literature. Archives of medicine and health sciences 2014;2:202-205.
- [7]. Johansen Taber KA, Morisy LR ,Osbahr AJ. Male breast cancer: risk factors, diagnosis and management(Review). Oncol Rep.2010;24(5):1115-20.



Figure-1 Pre-operative picture showing carcinoma in right male breast

LEGENDS



Figure-2 Intra-operative picture showing margins of dissection of breast and axilla.



Figure 3a

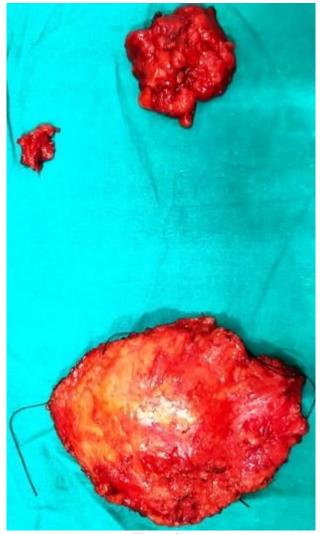


Figure 3b Figures 3 (a&b)- Post-operative picture showing anterior and posterior margins of breast alongwith axillary lymph nodes

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