



ORIGINAL RESEARCH PAPER

General Surgery

A CASE SERIES ON MALE BREAST CARCINOMA

KEY WORDS: Male breast carcinoma, gynaecomastia.

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ABSTRACT

Male breast carcinoma is a rare disease with very low incidence and very late presentation at advanced stages. The scarcity of cases has reduced the focus of research in this area as compared with female breast cancer. The incidence of breast cancer in males is slowly rising and it becomes important to study the biology of this uncommon illness. Staging and prognosis of male breast carcinoma is same as the female breast carcinoma. The presentation is mostly with skin involvement because of lack of awareness amongst both people and general clinicians. Here We indent to present three different presentation of metaplastic carcinoma and its management between January 2021 to December 2021. Male breast cancer usually needs surgery followed by chemotherapy and Hormonal therapy with or without radiotherapy.
Introduction: Male breast cancer (mbc) is a rare disease, < 1% of all breast cancer diagnoses worldwide. < 0.5% of total cancers in men. Low incidence rate - relatively low amount of breast tissue and difference in their hormonal environment. The disease is more often diagnosed at more advanced stages (3 or 4) in men, in contrast to women. Preceded by gynaecomastia in 20% of men. Strongest association with klinefelter syndrome. Median age of presentation is 6th decade (68 years). Male breast cancer has unimodal age-frequency distribution. Conversely, female breast cancer has a bimodal age-frequency distribution with early-onset and late-onset peak incidences at 52 and 72 years old, respectively Although it is rare, there have been instances of breast cancer in younger males. Breast cancer is seen at a relatively early age in Indian males. Disease is aggressive in nature with high hormone receptor positivity

Case reports :

Case 1:

A 48 year old male presented with chief complaints of Lump in the right breast since 6 months, Pain & bleeding from nipple with ulceration since 1 week. No history of trauma, loss of weight and appetite, bony pain, cough, breathlessness, chest pain, on examination, 4 x 4 cms hard , well defined , mobile lump palpable in lower outer and central quadrant of right breast, ulcer of size 2x2 cms noted involving the nipple. No scar ,no redness, no peau orange, no dimpling or puckering. Opposite breast appear normal. nipple areola complex appear normal. No fullness in both axilla. On palpation, A single , mobile , firm , anterior axillary node of size 1 x 1 cms palpable in right axilla. Mammogram showed birads v Trucut biopsy showed invasive breast carcinoma (no special type) with Er +ve, pr +ve, her 2 neu - 60%. Cect chest / cect abdomen / bone scan - normal. Staged as 3b (t4an1m0). Modified radical mastectomy with latissimus dorsi flap done and histopathology showed Invasive breast carcinoma (no special type), Pathological grade ii - pt3n0mx, No perineural or lymphovascular invasion, Resected 15 lymph nodes show reactive hyperplasia All margins free from tumor infiltration, Ihc for nodal micrometastasis & panck - negative. Started on with adjuvant chemotherapy.



Case 2:

A 60 year old male presented with chief c/o Lump in the right breast since 4 years, Pain over the lump since 3 months. Ulceration over the breast lump since 1 month Bleeding from ulcer since 20 days. No history of trauma, loss of weight and appetite, bony pain, cough, breathlessness, chest pain. On examination, 10 x 10 cms fungating lump with bosselated surface & well defined borders involving all quadrants of right breast. Right nipple & areola found buried within the

lump. Dilated veins noted over the surface of the lump. Ulceration noted over the lump in lower outer quadrant with active bleeding. Lump is variable in consistency. No palpable nodes in b/l axilla. Incisional biopsy - invasive breast carcinoma (no special type) with Er/pr : positive ; her-2-neu : equivocal. Usg - b/l axilla - no significant axillary lymphadenopathy. Cect chest / cect abdomen / skeletal survey - normal. Staged as 3b(T4N0M0). Modified radical mastectomy with latissimus dorsi flap done. Histopathology showed Invasive breast carcinoma (no special type). Pathological grade ii - pt3n0mx. No perineural or lymphovascular invasion. 3 lymph nodes removed - show reactive hyperplasia. All margins free from tumor infiltration. Currently patient is on adjuvant chemotherapy (adriamycin & cyclophosphamide - 4 cycles).



Case 3 : 58 yr female admitted with complaints of ulcerative lesion over right nipple for past 10 days and lump in the right breast for past 4 months, insidious in onset, gradually increasing in size not associated with pain or nipple discharge. No bone pain, jaundice, chest pain. On examination, 3x2 cms ulcer involving the right nipple with well defined margins and 4x3 cms lump palpable in the subareolar region of right breast, hard, irregular surface , mobile with breast tissue, no dimpling or puckering and not fixed with chest wall. Both axilla free. mammogram done came as Birads - V. Core needle biopsy came as invasive carcinoma of breast (no special type), usg both axilla shows no lymphadenopathy, cect chest and abdomen was normal. Stages as 3b , T4bN0M0. Proceeded with modified radical Mastectomy with latissimus dorsi flap. Histopathology showed invasive breast cancer (no special type) , er+, pr+, her2/neu 40%, all margins free from Tumor Infiltration, resected 10

nodes shows reactive hyperplasia, no. Lymphatic or perineural Invasion. started with adjuvant chemotherapy.



DISCUSSION:

Male breast when compared to females , incidence : female – 5th decade, male – 6th decade. The incidence of invasive lobular cancer and in-situ disease are rare in men. Mbc more frequently manifests itself as a locally advanced disease (skin and/or nipple involvement, localized in the subareolar area. Malignant calcifications are less in male breast cancer. To be differentiated from being Gynaecomastia, Liposarcoma ,Stromal tumor, Secondaries breast, Breast abscess. With risk factors being Increasing age ,proven Klinefelter syndrome (strongest),Family history (about 20%), Brca2>brca1 gene mutations and potential Testicular conditions, Diabetes, obesity,Liver cirrhosis. Syndromes – cowden / li-fraumeni /hnpcc. Usual presentation are lump in the breast (usually painless in Sub areolar region), Nipple changes (retraction, discharge, ulceration) ,Enlarged lymph nodes under the arm , Histologically, 90% are invasive ductal carcinomas while the rest belong to dcis, Approximately 80% - hormone receptor positive (about 80% -er +ve) and so adjuvant tamoxifen is considered. Absent terminal lobules in male breast, invasive & in-situ lobular carcinoma are rarely seen. Prognostic factors are same for male and female breast cancer (nodal involvement, tumor size, histologic grade & receptor status). There are no specific guidelines for male breast cancer treatment as there are for female breast cancer.

SURGERY:

Modified radical mastectomy is the traditional surgical treatment of male breast cancer, because of the unwanted side effects of adjuvant therapy necessary in breast conserving surgery. The recurrence is less with mastectomy than breast conserving surgery. Breast conserving surgery is used much less often in male breast cancer Because, Tumor located behind the nipple and Many times has grown into the nipple which requires more extensive surgery such as a mastectomy. If bcs is done, it is typically followed by radiation therapy. Sentinel lymph node biopsy is indicated when the Tumor size <2.5 cms, No clinical evidence of axillary lymph nodes metastases ,To prevent undesirable axillary lymph nodes dissection side effects such as lymphedema and nerve injuries, Sentinel lymph node biopsy - detection rate close to 100% .

CHEMOTHERAPY:

Indication for chemotherapy 1 positive lymph nodes, 2.tumors larger than 1 cm, and 3.negative for hormone receptors. Triple negativity is a sign of aggressiveness → accepted as an indication for ct. For node negative patients, anthracycline-based ct is preferred, whereas for node positive patients, anthracycline and taxane are used. Trastuzumab must be administered in case of her2/neu positivity, in node-positive or high-risk node negative disease Her2/neu and p53 expression are indicators for poor prognosis and these patients may require a more aggressive systemic treatment.

RADIOTHERAPY:

Rt is recommended – 1. Positive lymph node, 2. A tumor >5 cm and 3. Margin positivity in male breast cancer. Adjuvant loco-regional rt - More advanced stages and the more aggressive progress in males. Post-mastectomy rt Women – decreases local recurrence and increaslong-term survival, Men - only

local tumor control & does not influence survival

HORMONAL.THERAPY:

Since male breast cancer is rich in hormone receptors and is more sensitive to hormonal therapy Studies suggest that hormonal therapy should be the primary treatment method, Tamoxifen or another hormone therapy for 5 years is recommended to those with positive estrogen receptor(er+) Tamoxifen is widely accepted medication for hormonal therapy whereas the role of aromatase inhibitors (letrozole) is limited.

Multiple treatment modalities exist for reconstruction. The external oblique and v-y latissimus dorsi musculocutaneous advancement flaps serving as workhorses in reconstruction. Excision of the primary tumor by makes primary closure difficult which warrants the need of plastic surgeons to achieve closure of wounds that heal quickly

CONCLUSION :

Male breast cancers accounts <1% of breast cancers diagnosed. Invasive ductal carcinoma in young men is extremely rare; Common in Sixth decade. Associated with Klinefelter, family history and brca2 (in young males) The pathophysiology of breast cancer in males is not adequately understood., commonest type being Infiltrating ductal carcinoma; lobular – rare. Presentation are at advanced stage(stage 3 and 4)with skin changes/ulceration. Staging is same as female breast cancer. Multimodality treatment is required. Modified radical mastectomy with flap cover/stsg + adjuvant chemotherapy +/- hormonal +/- radiotherapy is current treatment. 80% hormonal receptors +ve. Primary hormonal therapy (tamoxifen) is suggested in studies. Sentinel Lymph node biopsy is done in early stage with no clinical nodes. Lack of awareness must be addressed to reduce late presentation and for better prognosis.

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