Carcinoma of Male Breast – Report of 2 Cases

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Abstract

Carcinoma of male breast is a rare malignant epithelial tumor all over the world. It accounts for less than 1% of all breast cancers & occurs commonly in older age with the peak incidence around 7th decade.

Histologically the male breast carcinoma is remarkably similar to that of carcinoma seen in female breast. Most of the cases are found to be infiltrating duct carcinoma (60%) with Papillary Carcinoma invasive as well as in situ being more common.

Hereby we report two male patients who presented with lump in breast. FNAC was positive for malignancy and modified radical mastectomy was done in both cases. The diagnosis of Infiltrating Duct Carcinoma (NST) & Invasive Papillary Carcinoma was given.

KEYWORDS : Carcinoma, male breast

INTRODUCTION:

Breast carcinoma has been considered as a female dominated disease where as male breast carcinoma is relatively rare constituting less than 1% of all breast carcinomas.[1] It occurs commonly in older age groups with peak incidence around 6th-7th decade of life.[2,3] men have more advanced disease at diagnosis and larger tumor size than women due to delayed diagnosis, resulting in a higher morbidity and mortality The main reason being late presentation and lack of self-awareness.[1]

Histologically, the male breast carcinoma is remarkably similar to that of carcinoma seen in female breast.[4,,5]Most of the cases are of Infiltrating Duct Carcinoma (68%- 98%),[1,6] Papillary Carcinoma both (invasive & insitu) being more common. [4,5]

CASE REPORTS		
	Case 1	**Case 2**
Age	61 yrs	52yrs
Clinical presentation	Right breast lump since 2 months	Left breast lump since 1-2 months
Past history	H/O trauma to Rt chest wall 10 years back	No significant past history
On examination	Rt breast lump measuring 4×3.5×2 cm, firm, mobile, non tender, with retraction of the overlying skin & nipple.	Lt breast lump measuring 3×3×2 cm, hard, with retraction of overlying skin & nipple.
	Axillary lymph nodes palpable.	Axillary lymph nodes not palpable.
Mammography	Not done.	Neoplastic lesion with no evidence of involvement of chest wall or axillary lymphadenopathy.
FNAC	Positive for malignancy (Fig No1).	Suspicious for malignancy.
Operative	Modified Radical Mastectomy with axillary dissection was done in both the cases & the specimens were sent to the Dept of pathology.	
Gross	C/S: Tumor mass, 5×2.5×2cm, grayish-white, firm (Fig No2)	C/S: Tumor mass, 3×3×2cm, grayish-white, firm.
Histopathology & Final diagnosis	Invasive papillary carcinoma-grade II with involvement of posterior margins. 4 lymph nodes (out of 9) showed metastatic tumor deposits. No vascular emboli seen. (Fig No 3,4,6)	Infiltrating Duct Carcinoma – NST – grade I No lymph nodes were involved. (Fig No 5)

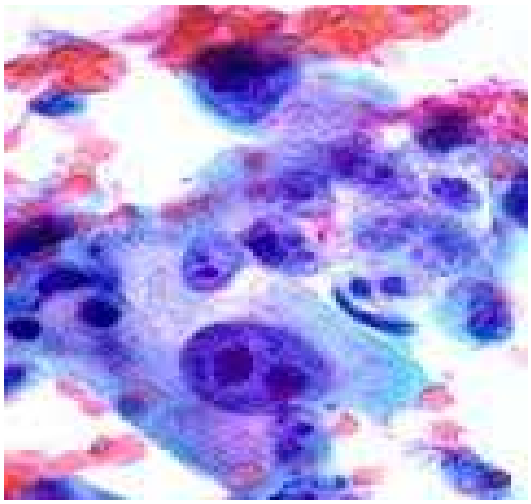

Fig No 1: Photomicrograph of FNAC smear showing pleomorphic tumor cells with hyperchromatic nuclei with prominent nucleoli (H & E 40X).

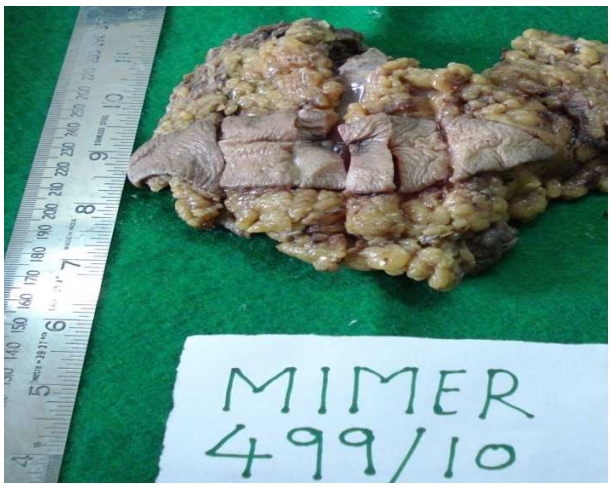

Fig No 2: Photograph showing tumor mass.

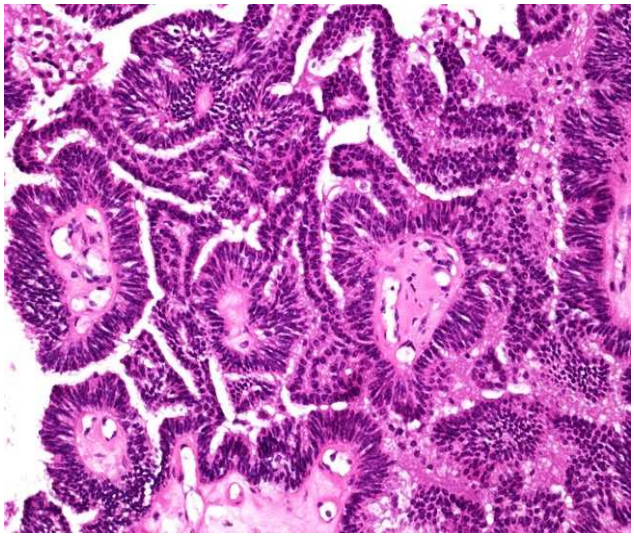

Fig No 3: Photomicrograph showing tumor cells arranged in papillary pattern with fibrovascular cores (H & E 10X).

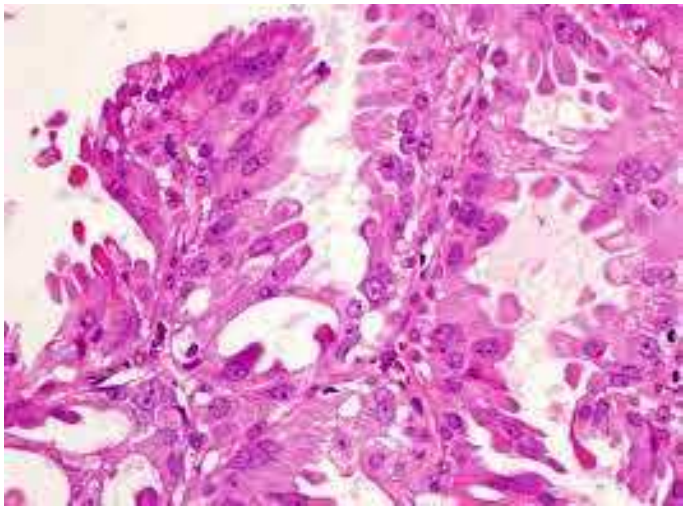

Fig No 4: Photomicrograph showing tumor cells arranged in papillary pattern with fibrovascular cores (H & E 40X).

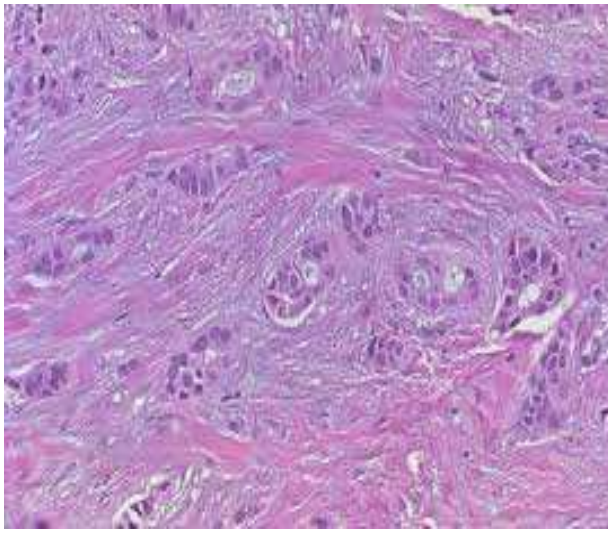

Fig No: 5 Photomicrograph of Infiltrating Duct Carcinoma (NST) showing tumor cells arranged in desmoplastic stroma (H & E 40X).

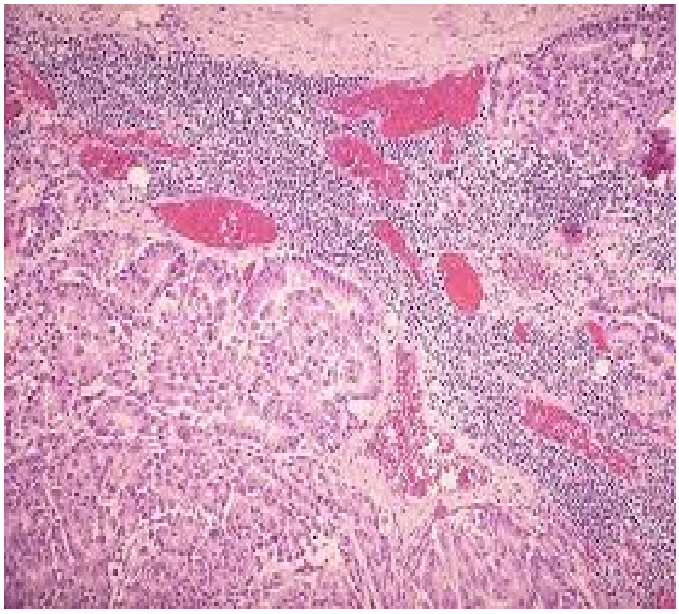

Fig No: 6 Photomicrograph showing tumor deposits in a lymph node (H & E 10X).

DISCUSSION

Carcinoma of male breast is extremely rare, with an incidence of less than 1%.[1] It is usually seen in older age group, around 6^{th} – 7^{th} decade of life .[2,3] In our case, the patients were from 5^{th} to 6^{th} decade of life.

Risk factors are similar to those in females and include 1^{st} degree relatives with breast cancer, decreased testicular function (Klinefelter Syndrome), exposure to exogenous estrogen, increasing age, infertility, obesity, trauma. Gynecomastia does not seem to be a risk factor.[1,3,4] In our case, history of trauma was present only in one case.

Clinically most of the patients present with palpable subareolar mass, nipple ulceration or sanguineous secretion is seen in 15-30%. In 25-30% of patients, there is fixation to or ulceration of the overlying skin. A quarter of patients complain of pain.[1,3,7]Male breast carcinoma is usually unilateral & occurs more frequently in left breast.[1] Both of our patients presented with breast lump with nipple retraction.

Grossly & microscopically carcinoma of the male breast are very similar to those seen in females, although the incidence of papillary (both invasive & in situ) are more common in males[1,4,7]. In our case one of the patient was diagnosed as Papillary Carcinoma grade II with involvement of posterior margin & 4 lymph nodes & the other patient had Infiltrating duct Carcinoma grade I.

FNAC & mammography play a valuable role in diagnosis of carcinoma in male breast, as seen in our cases.

The treatment of choice is modified radical mastectomy with axillarydissection, which was done in our cases. Prognosis of carcinoma male breast is significantly related to stage at diagnosis (as determined by tumor size & nodal status). Most investigators have concluded that male & female patients with the same stage of disease have similar prognosis. However, the prognosis of carcinoma male breast is poor probably because the small volume the breast, increased likelihood of skin & nipple involvement with invasion of dermal lymphatic's &early metastatic spread.[5] One of the patients follow up is available & has no history of recurrence whereas other patient is lost to follow up.

CONCLUSION :

Screening for male breast carcinoma is not practical due to the small percentage of involved patients. However, due to lack of self-awareness, these patients usually present late with delayed diagnosis, and larger tumor size resulting in a higher morbidity and mortality.

BIBLIOGRAPHY

1. N Syeed, S Abdullah, A Sameer, M Siddiqi, N Chowdhri, S Hussain. A Case Report Of A 14-Year-Old Male Patient With Breast Carcinoma. The Internet Journal of Surgery. 2009 Volume 24 Number 1.
2. Stuart J. Schnitt, Rosenary R. Millis, Andrew M. Hanby et.al-The breast Chapter 9 In: Stacey E. Mills. Sr. editor. Sternberg's diagnostic surgical pathology vol II ,4th ed. Lippincott Williams & Wilkins, 2004; 323-395.
3. Paul Peter Rosen Carcinoma of the male breast Ch36 In: Rosens breast pathology 3rd edition Executive Editor Jonathan W. Pine; 787-805.
4. K. prechtel, F. Levi, C. Lavecchiaet.al : Tumors of the male breast chapter 1 In: World Health Organization classification of Tumors. Pathology & Genetics of Tumors of the Breast & female genital organs. IARC Press: Lyon 2003;110-2.
5. C Lester The breast Ch.23 In : Robbins & Cotran pathologic basis of disease 8th edition; 2010; 1093-1094.
6. Steven G. Silverberg et. al- The breast No : 19 In principles & practice of surgical pathology &cytopathologyb 3rd edition Vol 1; 661.
7. Rosai J. Breast Chapter 20. In: Rosai J, Editor. Ackerman's Surgical Pathology vol II. 9th edition. St Louis: Mosby; 1996; 1763-1876.