JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH

How to cite this article:
SAMANTRAY S, PATTANAYAK L, KAKKAR S. PAPILLARY CARCINOMA OF MALE BREAST. Journal of Clinical and Diagnostic Research [serial online] 2007 October [cited: 2007 October 1];5:407-408.
Available from http://www.jcdr.net/back_issues.asp?issn=0973-709x&year=2007&month= October &volume=1&issue=5&page=408-408&id=111

CASE REPORT

Invasive Papillary Carcinoma of Male Breast: A Case Report

SAMANTRAY S*, PATTANAYAK L**, KAKKAR S***

ABSTRACT

Background: Male breast cancer represents less than 1% of all cancers in men. Even in females, invasive papillary carcinoma of the breast is a rare morphological type.
Case: A 60 year old male presented with a lump in the left breast. There were no palpable nodes in the axillae or supraclavicular region. Aspiration cytology revealed clusters of cells arranged in a papillary configuration, suggestive of a papillary lesion of the breast. A simple mastectomy was done, and the histopathology revealed columnar cells arranged in clusters. There was evidence of stromal invasion. One year after completion of treatment, he is asymptomatic and stable.
Conclusion: Papillary carcinoma of the breast is extremely rare. The invasiveness and differential diagnosis must be studied from the histopathology specimen.
Keywords: Papillary Carcinoma, Male Breast Cancer.

Key message:

1. Papillary Carcinoma of Breast is a rare histological diagnosis, especially in males.
2. Histological type has an important bearing on treatment and prognosis.

Introduction

Male breast cancer represents less than 1% of all cancers diagnosed in men [1]. The predominant histopathological type is the infiltrating ductal carcinoma, accounting for 70% of all cases [2]. Even in female patients, invasive papillary carcinoma is a rare morphological type. We report here, the clinicopathological features and prognosis in a 60-year-old male with invasive papillary carcinoma of the breast.

Case Report:

A 60 year old man presented in the Regional Cancer Centre, Cuttack, with complaints of a mass in the left breast since 3 months. He was addicted to smoking tobacco since 10 years. There was no history of mumps, testicular injury, cirrhosis of liver or any contributory family history.

On physical examination, he was of average built, mildly pale, and non-icteric. The rest of the systemic examination revealed no abnormality. On local examination, there was no gynaecomastia. A 5x4 cm, well circumscribed, firm, non-tender and mobile mass was noted in the upper and outer quadrant of the left breast. There was no evidence of skin involvement or regional lymphadenopathy. Fine needle aspiration cytology of the mass revealed clusters of columnar cells in a papillary configuration, suggestive of papillary carcinoma of the breast. All the staging investigations were essentially normal. The patient underwent simple mastectomy. Histopathological examination revealed invasive papillary carcinoma [Table/Fig 1] and [Table/Fig 2]. There were no lymphovascular emboli. Nipple section did not reveal any evidence of tumour. One year after treatment, he shows no evidence of locoregional spread or distant metastases on imaging study. He is currently asymptomatic and stable.

Discussion

Though all variants of carcinoma breast detected in females are also documented in males, invasive papillary carcinoma is an extremely rare occurrence in the male breast. The clinical

*Department of Oncopathology, A.H.Regional Cancer Centre, Cuttack,
**Ex Resident, Department of Radiation Oncology, A.H.Regional Cancer Centre, Cuttack
***Department of Radiation Oncology, Tata Memorial Hospital, Mumbai
Corresponding Address: Dr. Lucy Pattanayak, 490/B, Santa Sahi, Canal Road, Bajrakabati, Cuttack - 753001,
Orissa, India. Email:lucypattanayak2006@yahoo.co.in. Tel: 099370-28362Fax

presentation of male breast cancer is similar to that in females, but the median age at presentation is later (60 vs. 53 years) [2]. Most of them present with a palpable mass or lump as seen here [3]. Aetiology remains unclear, but is related to the cumulative lifetime exposure to oestrogen. Histologically, papillary carcinoma is divided into intraductal and intracystic papillary carcinoma, which are further subdivided into invasive and non-invasive forms, depending on whether invasive elements are detected in the lesion. Papillary carcinoma arises from the larger and centrally placed ducts of the breast [4]. Invasiveness and differential diagnosis must be studied on the histopathology specimen. They show columnar cells in a papillary configuration, arranged in clusters, as seen in the present case, and as similarly reported by Haji et al, [6] that cohesive cluster of cells is an important parameter to differentiate between benign and malignant papillary lesions. The optimum treatment that remains is excisional biopsy for noninvasive tumours, and simple mastectomy for invasive papillary carcinoma [5]. Papillary carcinoma belongs to one of the morphological variants of breast carcinoma, which carries a favourable prognosis compared to the conventional, more commonly detected invasive ductal carcinoma of the breast. A 10 year survival of 90% is not uncommon [4], [5].

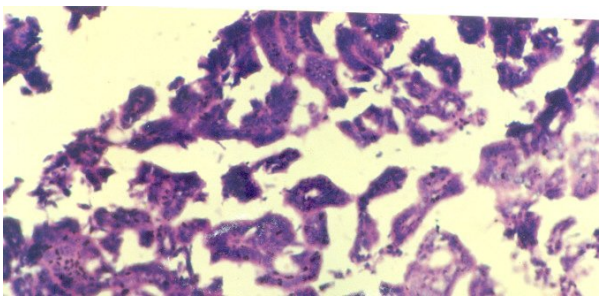
Conclusion

Papillary carcinoma of male breast is an extremely rare entity. Though aspiration cytology can confirm diagnosis, an excisional biopsy is conclusive. However, long term monitoring is paramount to reach definitive conclusions regarding the nature and extent of treatment in invasive papillary carcinomas.

References

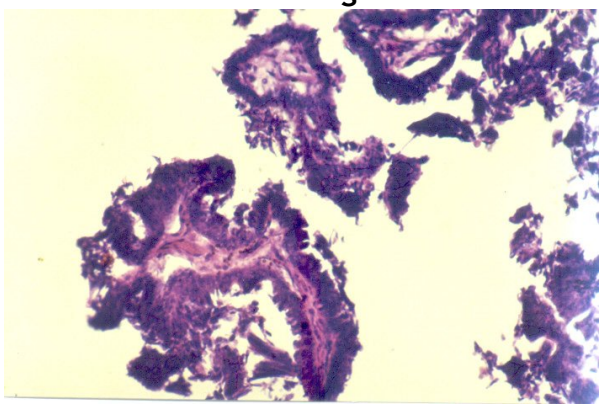
[1] English JC, Middleton C, Patterson JW et al. Cancer of the male breast. Int J Dermatol 2000; 39: 881-6.
[2] Ravandi-Kashani F, Hayes TG. Male Breast Cancer: A Review of the literature. Eur J Cancer 1998:34:1341.
[3] Kato M, Ishigure H, Matsuda M et al. A case of intracystic carcinoma of the male breast. Nyugan No Rinsho 1997; 12: 230-4.
[4] Lefkowitz M, Usar CM, Lefkowitz W et al. Intraductal papillary carcinoma of the breast. Hum Pathol 1994; 25:802-9.
[5] Cutuli B, Dihuydy JM, De Lafontan B et al. Ductal carcinoma in situ of male breast. Eur J Cancer 1997; 33 : 35-38.
[6] Haji BE, Das BK, Abdeen SM et al. Fine-needle aspiration cytologic features of four special types of breast cancers: mucinous, medullary, apocrine and papillary. Diagn Cytopathol 2007; 35 (7):408-16.

Table/Fig 1



Columnar cells arranged in clusters, in a papillary configuration with evidence of stromal invasion suggestive of invasive papillary carcinoma of the breast.

Table/Fig 2



Histopathology showing columnar cells arranged in clusters in a papillary configuration. The carcinoma cells are round to polyhedral with mild atypia, slight nuclear hyperchromasia and small nucleoli.