PRIMARY PAPILLARY TRANSITIONAL CELL CARCINOMA OF THE BREAST: A CASE REPORT

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ABSTRACT

Background: Primary papillary transitional cell carcinoma of the breast is a rare occurrence worldwide and few cases ever have been reported. It may be mistaken for the benign intraductal papillary lesions or papillary adnexal neoplasms.

Case Report: A 66 year old woman who presented with a recurrent right breast mass. Histopathologic studies confirmed a diagnosis of Primary Papillary Transitional cell carcinoma.

Conclusion: The need for a high index of suspicion of primary papillary transitional cell carcinoma of the breast must be considered, especially in suspected benign intraductal papillary lesions to facilitate adequate and timely diagnosis and management of this lesion.

Key Words: Breast, primary papillary transitional cell carcinoma.

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INTRODUCTION

Primary papillary transitional cell carcinoma of the breast is a rare neoplasm. Papillary carcinomas of the breast exhibit a spectrum of morphologic appearances and might be mistaken for benign intraductal papillary lesions or papillary adnexal neoplasms. Rarely, the proliferating cells within centrally located intraductal papillary lesions assume a transitional-squamoid appearance. Myoepithelial cells are absent in these papillary processes and a designation of low grade, transitional cell, papillary carcinoma seems appropriate for these tumours.

CASE REPORT

A 66 year old female farmer, postmenopausal, para-4 presented to the Surgical out-patient department of Nnamdi Azikiwe University Teaching Hospital, Nnewi with a 3 year history of right breast swelling. There was an antecedent history of a right breast lump for which the patient presented at a peripheral hospital and had a lumpectomy done, and a diagnosis of a breast cancer was made according to the patient's history. The histology report of this breast surgery was however not available and no further treatment was given. Patient also attested to the fact that at the time of her first surgery, the current swelling in her right breast was small in size, hard and non-tender. There was no accompanying cough, jaundice, bone pain or any other swellings. The swelling continued to increase in size gradually. She

denied any family history of breast disease, and there was no history of contraceptive use. Clinical examination revealed a healthy-looking patient, with a right breast surgical incision scar 4.5cm long in the upper outer quadrant. Very close to this scar was a breast mass of about 6x5cm, which was hard and nodular and fixed to the skin but not to underlying tissues.

Operation Findings Were:

Hard mass, approximately 6x5cm in the upper outer quadrant of (R) breast which was attached to overlying skin. Multiple satellite lesions were also present. Mass was not encapsulated and was difficult to excise. The underlying fascia and muscles were not involved. The lesion was excised with overlying attached skin.

Pathologic Findings:

Gross examination revealed a seemingly encapsulated firm nodular fibro-fatty mass bordered on one side by Negroid skin with peau-d'-orange features measuring 6x5x4cm with a surgical scar measuring 4.5cm in length on the skin. The cut surface showed a grayish white infiltrating mass measuring about 2.5x2cm. No obvious lymph nodes were seen and the resection margins appeared free of tumour.

Microscopic examination showed a partly encapsulated infiltrating tumour consisting of arborizing papillary structures. These papillary structures were composed of multilayered transitional epithelium with a fibro-vascular core. The cells are hyperchromatic and slightly pleomorphic. There is very little mitosis seen.

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The attached lymph node was edematous and showed only mild structural distortion. No obvious nodal or peri-neural invasion was seen. Focal areas of tumour necrosis where seen. A diagnosis of papillary transitional carcinoma of the breast was made based on histological findings.

Subsequently patient absconded from further treatment.

Macroscopic picture of the breast lesion is shown in figure 1. Figure 2 shows the picture of the cutsections of the lesion.

Histology section of x100 magnification is shown in figure 3.

Figure 1: Gross Appearance of the Breast Mass.

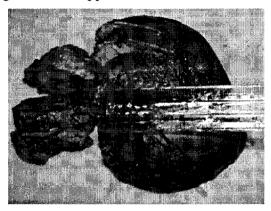
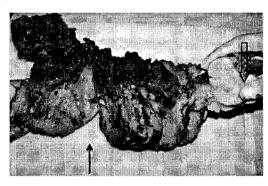
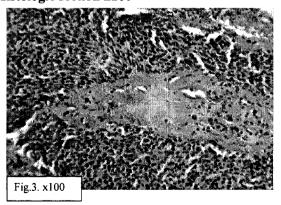


Figure 2: Cut-sections of the Breast Mass.



Histologic section x100



DISCUSSION

Papillary transitional carcinoma of the breast is a very rare lesion but care must be taken not to mistake it for some benign lesions that look similar to it such as benign intraductal papillary lesions or papillary adnexal neoplasms. The stimulus for its development is unclear but it seems to behave in a similar fashion to other types of papillary carcinoma of the breast. Transitional epithelial tumours are commoner in the urinary bladder and to a lesser extent, in the naso-pharvngeal region. In fact, in making a histological diagnosis of papillary transitional carcinoma of the breast, metastatic lesions from these commoner sites must be excluded. In this patient, there was no evidence of a urinary bladder or nasopharyngeal lesion. Mooney and Tavassoli reported five cases of papillary carcinoma of the breast in which the epithelium closely resembled transitional cells of the urinary bladder.1 The importance of distinguishing this lesion from various benign lesions especially benign intraductal papillary lesions cannot be overemphasized. A misdiagnosis of this lesion for benign as most probably may have happened in this patient led to the docile attitude of this patient and the subsequent recurrence of the tumour after the first biopsy for which there was no chemotherapy or radiotherapy. If a correct diagnosis was made when the patient first presented many years ago and had surgery, she may have benefitted from combined mastectomy, chemotherapy and radiotherapy. Postoperatively, at second presentation now at our centre, this patient was unfit for chemotherapy and refused blood transfusion on religious grounds. However, Tamoxifen was commenced, before the patient eventually absconded from this hospital.

REFERENCES

- 1. Mooney EE, Tavassoli FA. Papillary Transitional Cell Carcinoma of the Breast: a report of five cases with distinction from eccrine acrospiroma. Mod Pathol. 1999 Mar; 12(3):287-94.
- **2. Tavassoli FA.** Unusual Papillary Lesions. Pathology of the Breast. Appleton and Lange, Norwalk Connecticut. 1992; Ch6 pg 227.