



## A RARE CASE OF INVASIVE PAPILLARY CARCINOMA OF BREAST

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### ABSTRACT

Papillary carcinoma of the breast is extremely rare variety of carcinoma breast with a mere incidence of only 0.5% of all recently diagnosed cases of breast cancer. We present a case of 63 years old postmenopausal female who came to surgical outpatient department with complaints of a slowly increasing mass in the left breast of 1 month duration which was painless. A Left-sided modified radical mastectomy was performed with an absolutely normal post operative period. The final histopathology report was suggestive of invasive papillary carcinoma. We report this case as it is rarely diagnosed.

**KEYWORDS:** Invasive papillary carcinoma; modified radical mastectomy, carcinoma breast.

### INTRODUCTION

Papillary carcinoma of the breast is extremely rare variety of carcinoma breast with a mere incidence of only 0.5% of all recently diagnosed cases of breast cancer. The presentation is usually a gradually increasing lump in breast with or without blood discharge from the nipple <sup>[1]</sup>. Radiological investigation in the form of mammography or MRI breast is not so useful <sup>[1]</sup>. Histological features include numerous cells closely impacted around fibro vascular cores scattered throughout the breast tissue <sup>[2]</sup>. Invasive papillary carcinoma is distinguished from non invasive papillary carcinoma when the basement membrane is involved.

### CASE REPORT

A 63 years old postmenopausal female presented with a painless mass in the left breast of 1 month duration, gradually increasing in size. Fine needle aspiration cytology of the mass suggested papillary lesion with moderate atypia. Mammography reported a BIRADS 3 lesion suggesting a probability of benign lesion. Metastatic workup was done and there were no obvious evidence of metastasis. An excisional biopsy in the form of simple lumpectomy was done. Histopathology of the specimen

reported Papillary carcinoma breast, invasive type (Figure 1). ER, PR (Estrogen receptor & Progesterone receptor) & HER-2/*neu* (Human Epidermal Growth Factor Receptor 2) studies carried on specimen were positive (Figure 2a, 2b, 3). The patient was subjected to a modified radical mastectomy of the left breast. Post operative stay was uneventful and patient was discharged on 15<sup>th</sup> day. She was given 6 cycles of adjuvant chemotherapy consisting of 5-Fluorouracil, Adriamycin and Methotrexate, and aromatase inhibitors. A regular surveillance was advised to check for signs of recurrence, if any.

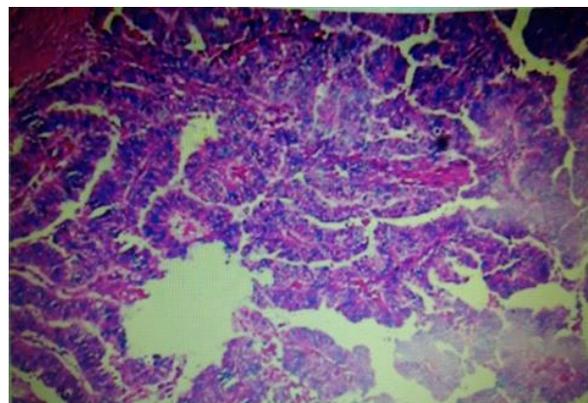
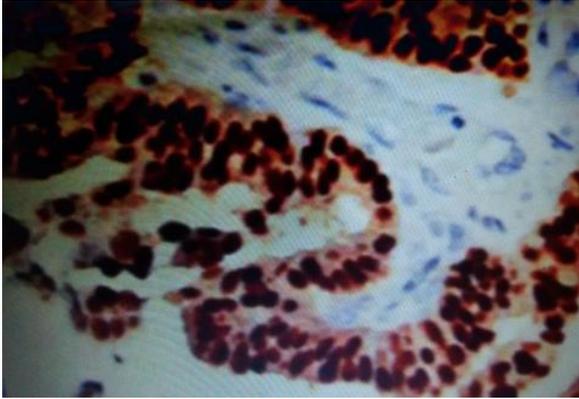
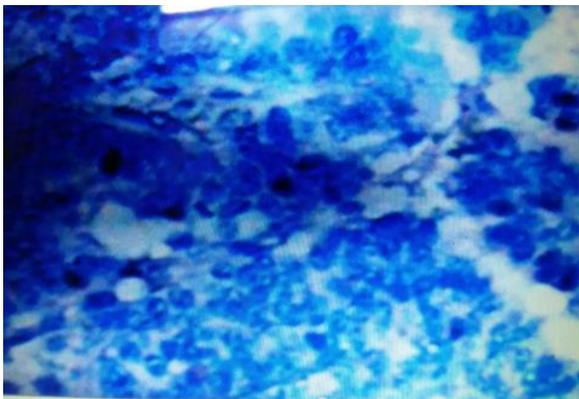


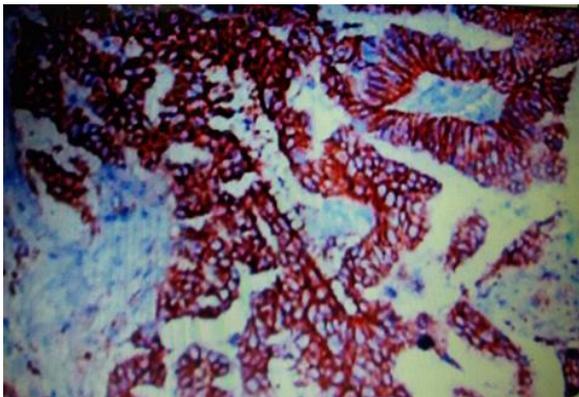
Figure 1. Papillary carcinoma breast, invasive type.



**Figure 2a. Nuclear staining of estrogen receptors, brownish staining of receptors(x 200 magnification)**



**Figure 2b. Nuclear staining of progesterone receptors, bluish staining of receptors(x 200 magnification)**



**Figure 3. Focus of circumferential membrane staining for HER-2/neu receptors (x 300 magnification)**

### DISCUSSION

According to the literature, Invasive Papillary carcinoma (IPC) is extremely rare type of breast malignancy with a reported incidence of just 0.5 to 1% among all breast carcinomas. It

carries a very good prognosis and is seen in elderly females<sup>[4, 6]</sup>. The distinguishing feature of non-invasive papillary ductal carcinoma is the presence of fibro vascular cores with surrounding neoplastic cells. The neoplastic epithelium shows benign looking stratified columnar cells; but sometimes areas of closely impacted cells giving a nodular appearance, or forming a cribriform pattern, or showing minute papillary proliferations can also be demonstrated. Nuclei may show hyper or hypochromatism. Another characteristic feature of papillary DCIS is the absence of myoepithelial cell layer which is present in all other variety of Ductal carcinoma in situ. Multifocality can also be seen throughout the breast stroma<sup>[3]</sup>. Patients do not present with axillary lymphadenopathy unless there is evidence of micro invasion in papillary DCIS. The risk factors for papillary DCIS and other varieties of breast carcinoma are same<sup>[5]</sup>. The management of papillary breast carcinoma is surgical in the form of modified radical mastectomy if there is evidence of invasive papillary carcinoma otherwise a lumpectomy will suffice in case of papillary DCIS. A local radiation therapy is recommended after breast conservation surgery. Chemotherapy schedule is same as that for other breast malignancies if there is evidence of invasive papillary carcinoma. The prognosis of papillary carcinoma breast is better as compared to other breast malignancies<sup>[7]</sup>.

### CONCLUSION

Invasive Papillary Carcinoma of breast should be managed on the same principle as for any other breast carcinoma requiring a modified radical mastectomy with adjuvant chemotherapy and hormonal therapy if the tumor shows positive estrogen/progesteron receptor status.

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