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Case Report

# Papillary Carcinoma Breast in Male Patient: A Rare Presentation

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**Abstract**

**Introduction**: Male breast carcinoma is rare, accounting for 1% of all malignancies in men and around 1% of all cases of breast carcinoma. Intracystic papillary carcinoma accounts for 0.5–1% of all breast cancers. It generally has good prognosis in women with almost 100% reported 10 year survival rate.Similar data for male patients is not available as the disease is extremely rare.

**Presentation of Case**: A 52 year-old male patient presented with a swelling in his left breast. Swelling had gradually increased in size. On examination, a well-circumscribed swelling was palpable in retro aerolar region with nipple retraction. Mass was not fixed to underlying pectoralis muscle.A large mobile axillary lymph node was palpable. Fine needle aspiration was done, which reported "atypical ductal hyperplasia". A core biopsy was done which displayed features of intracystic papillary carcinoma. A left modified radical mastectomy was carried out with axillary dissection. The biopsy report of the specimen confirmed the diagnosis of intracystic papillary carcinoma, tumor deposits were seen in lymph nodes. Adjuvant chemotherapy was given postoperatively. Patient recovered well.

**Conclusion**: Intracystic papillary carcinoma is a rare malignancy of breast .It carries an excellent prognosis with upto 100% ten years survival rates reported in females.

Surgery with chemotherapy has remained mainstay of treatment but due to rarity of the male breast cancer as such and Intracystic papillary carcinoma in particular, there are no clear guidelines for its management. Further analysis of this disease is needed for its better understanding and management.

**Keywords**: Male breast cancer; Intracystic papillary carcinoma
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# Introduction

Male breast cancer is rare and accounts for about 1% of all malignant breast neoplasm cases [1,2] .Histologically, invasive ductal carcinoma with an incidence ranging from 65- 95% [2,3] is the most prevalent breast cancer in males. Papillary carcinoma in men is an extremely rare disease with only a few case presentations published in the literature so far. Worldwide there are higher rates in North America and Europe and lower rates in Asia[4]. The mean age of diagnosis for men with breast cancer is 67 years[3].

Intracystic papillary carcinoma is rare and accounts for 0.5–1% of all breast cancers. It is usually seen in older women .It generally has good prognosis in women with almost 100% reported 10 year survival rate[5].Similar data for male patients is not available as the disease is extremely rare.

Development of specific treatment strategies for male breast carcinoma is hampered by a lack of large scale clinical trial data due to rarity of the disease. We hope with further reporting of such cases and larger clinical studies our understanding and approach to this disease would improve.

# Case Presentation

A 52 year-old male patient presented with a four month history of a swelling in his left breast.Swelling had gradually increased in size.He had no significant family history for breast cancer. On examination, a well-circumscribed, 7.5 cm swelling was palpable in retro aerolar region with nipple retraction, mass was not fixed to underlying pectoralis muscle(Fig.1).A large mobile axillary lymph node was palpable.

Fig. 1 Pre operative picture of patient .Nipple involvement can be seen

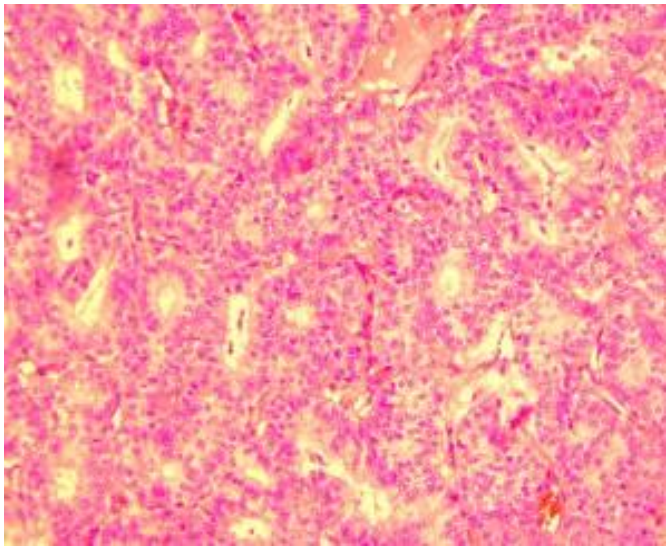

Fig. 2 Haematoxilin-Eosin stained specimen slide .Papillary and solid proliferation of atypical cells is seen.

Fine needle aspiration was done, which reported “atypical ductal hyperplasia”. To establish the diagnosis, a core biopsy was done which displayed features of intracystic papillary carcinoma (Fig.2). X rays and abdominal ultrasound did not show any distant visceral or skeletal metastasis.

A left modified radical mastectomy was carried out with axillary dissection(Fig.3). Patient recovered well, drain was removed on 5th day and sutures removed on 8th post operative day.

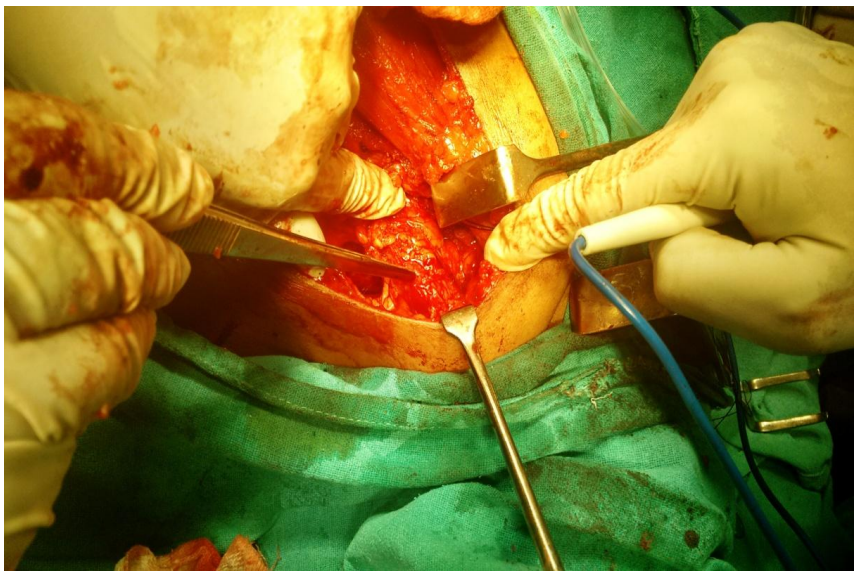

Fig. 3 Intra operative pictule. Axillary lymph node is being dissected

The tumor mass and axillary lymph nodes were removed en bloc and sent for histopathological examination(Fig.4).

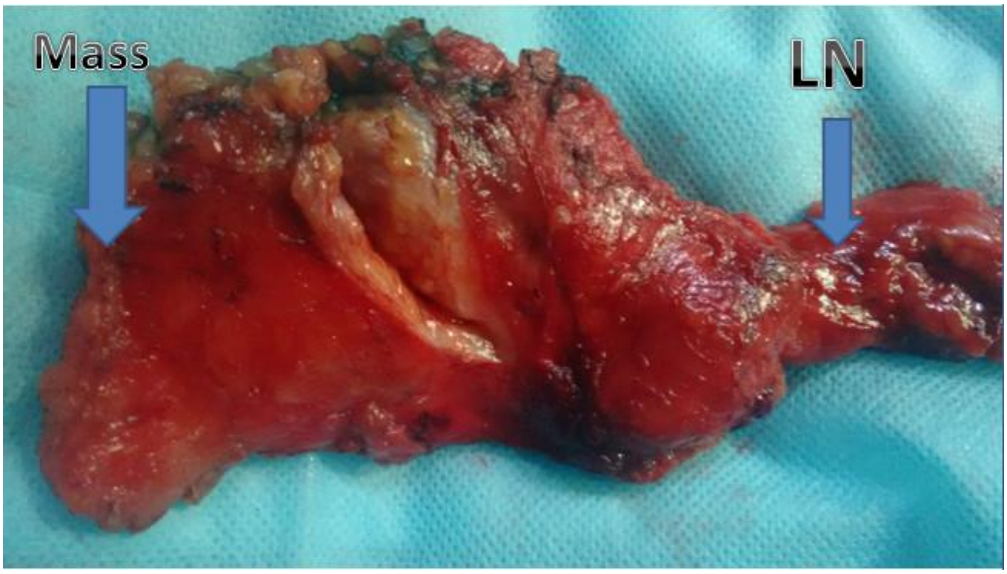


Fig. 4 Picture of the specimen showing tumor mass and lymph node

The biopsy report of the specimen confirmed the diagnosis of intracystic papillary carcinoma, tumor deposits were seen in lymph nodes . Margins were free of tumor cells . Immunohistochemistry showed oestrogen receptor (ER) and progesterone receptor (PR) positivity.

Adjuvant chemotherapy with 6 cycles of cyclophosphamide , doxorubicin , and 5-fluorouracil was given. Oral Tamoxifen therapy was also started.

# Discussion

Intracystic papillary carcinoma is a rare malignancy of the breast with a higher incidence range of 5–7.5% in men [6]. It occurs in an older age group of 68 - 84 years in males .It carries an excellent prognosis. Studies have shown upto 100% ten years survival rates and 4% distant metastases (female patients)[7]. Fine-needle aspiration cytology is the initial investigation though the false negative results with cytology are common [8]. Therefore,core biopsy and if needed, excisional biopsy should be carried out in doubtful cases.

Due to rarity of the male breast cancer as such and Intracystic papillary carcinoma in particular ,there are no clear guidelines for its management.

Grabowski et al. [9] confirmed surgery as the mainstay of treatment. Axillary node metastasis can occur in up to 14% of the cases [10], hence axillary dissection can be carried out in clinally evident lymph node involvement .Sentinel node biopsy is also recommended.

There role of hormonal treatment is also debatable. The addition of hormonal treatment does not appear to have impacted the outcome[10]. While other studies found that patients with DCIS or microinvasive disease in association with IPC were more likely to receive tamoxifen [11].

# Conclusion

Surgery with chemotherapy has remained mainstay of treatment but due to rarity of the male breast cancer as such and Intracystic papillary carcinoma in particular, there are no clear guidelines for its management. Further analysis of this disease is needed for its better understanding and management.

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