



Primary Squamous Cell Carcinoma of the Breast – A Rare Case Report

Authors

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ABSTRACT

Squamous cell carcinoma of the breast is an uncommon breast neoplasm. A forty five year old woman, was referred to Maharaja Yashwantrao Hospital, Indore following a diagnosis of carcinoma breast. She noticed a painless swelling in the right upper quadrant four weeks earlier and simultaneously developed a mass in the axillary region. A Fungating growth on the skin was identified. Physical examination revealed fungating growth in the skin, with no mass in the axilla. The occurrence of pure squamous cell carcinoma in younger age group is a rarity. Squamous cell carcinoma of breast is one such mystery, which is encountered very rarely. Its clinical behavior should not be correlated with the standard infiltrating duct carcinoma of breast. It follows an atypical presentation in terms of tumor size, lymph node and systemic spread. Squamous cell carcinoma of the breast is a rare and aggressive disease, and it has significantly worse prognosis than other nonsquamous cell tumours of the breast. Clinicians should be aware of aggressive nature of the tumour when counseling patients.

KEY WORDS: Carcinoma breast, squamous cell carcinoma (SqCC).

INTRODUCTION

Primary squamous cell carcinoma of the mammary gland is a very rare disease. Squamous cell carcinoma of the breast may originate from the epidermis, the nipple or if more deep seated from a change in epidermal cyst. The clinical and pathological features of twenty two squamous cell carcinoma was reported by Worgotz in the year 1990. The occurrence of squamous cell carcinoma in younger age group is a rarity.

CASE REPORT

A forty five year old woman was referred to Maharaja Yashwantrao Hospital, Indore following a diagnosis of carcinoma breast. She noticed a painless swelling in the right upper quadrant four weeks earlier and simultaneously developed a

mass in the mammary gland. Physical examination revealed a fungating growth in the skin, and no mass in the axilla was palpable.

TMN grading - T4b N0 Mx

All axillary lymph nodes were free from malignant cells.

HISTOPATHOLOGY

Macroscopically - A 45 year old female, right breast mass modified radical mastectomy specimen measuring 23x17x5 cm. Skin covered area measuring 21x15 cm.

On cut-solid gray white area. Fungating growth identified on the surface. Grossly, anterior margin was involved and 15 lymph nodes were identified. Microscopically, H&E Stained sections from the grey-white area show tumour cells of squamous

differentiation showing pleomorphic, polygonal cells with deeply basophilic round to oval nuclei, moderate amount of eosinophilic cytoplasm, altered nucleocytoplasmic ratio with keratin pearls. In one of the section, tumour cells are arranged in ducts and acini having vesicular

nuclei, dusky chromatin, prominent nucleoli. Features are of squamous cell carcinoma. At places showing glandular differentiation. This was a rare lesion. Anterior and posterior margins showed tumour invasion and all the lymph nodes were free.

SQUAMOUS CELL CARCINOMA



Figure 1 (Gross picture of specimen)

Reported in Dept. Of Pathology, MGM Medical College, Indore

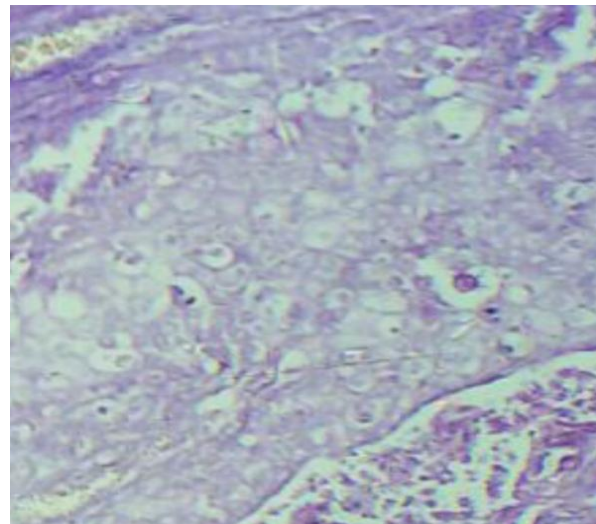
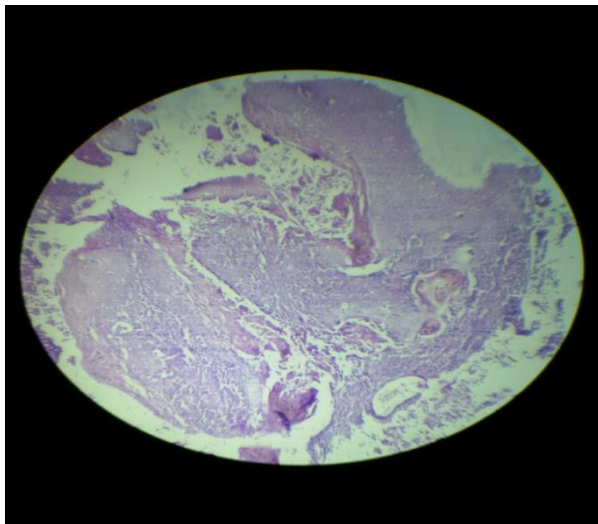


Figure 2 & 3: Hematoxylin-Eosin, 10x & 40 x

Photomicrograph showing Tumoural area of breast showing squamoid metaplastic changes. Individual cells having abundant eosinophilic cytoplasm and hyperchromatic pleomorphic nuclei

DISCUSSION

Primary breast SqCC accounts for less than 0.1% of all breast cancers, with only 137 reported cases in the United States between 1975 and 2012.^[7] In

breast Pure primary squamous cell carcinoma is a rare condition. It is considered to arise through metaplastic change of ductal carcinoma cells^[1]. The concept of a disease continuum with varying

degrees of squamous metaplasia was supported by Stevenson et.^[1] The Squamous cell carcinoma of the breast are generally large (> 4 cm) at diagnosis and cystic in 50% of the cases.^[2]

The prognosis of this type of breast cancer is still regarded as somewhat controversial, though many studies suggest that it is an aggressive disease that may behave like poorly differentiated breast carcinoma^[3,4,5].

A recent literature review reveals that an average of 70% of patients with SqCC of the breast do not present axillary lymph nodes involvement but due the unpredictable lymph nodes dissemination, axillary lymph nodes dissection could always be performed for staging purposes^[6] Our case was 58-year-old with duration of the disease four months, which is supported by literature.

Estrogen and progesterone receptors are negative in more than 90% of the cases of pure Squamous cell carcinoms breast which was also proven in our case.^[8,9,10]

CONCLUSION

Primary Squamous cell carcinoma of the breast is aggressive disease. Squamous cell carcinoma is very rare. Poor response of the Squamous cell carcinoma of the breast to chemotherapeutic regimens commonly used in breast cancer, suggests that EGFR inhibitors and platin based regimens could be a good option for treatment of Squamous cell carcinoma. In our report the choice of adjuvant therapy was perfect with the new trials of these rare tumours are needed to increase our knowledge and to improve patient's outcome.

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