



Research Article

PREVALENCE OF SQUAMOUS CELL CARCINOMA OF THE BREAST IN TERTIARY CARE CENTRE, BIKANER, RAJASTHAN

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ABSTRACT

Background- Mammary carcinoma is the most common malignant tumor in women, and it is the leading cause of mortality.

Method- Hospital based cross sectional study conducted in Dept. of Pathology, S.P.Medical College, Bikaner. From Jan.2014 to Feb 2018.

Results- During the year 2014, out of total 111 malignancies 1 case of squamous cell carcinoma was found, in year 2016, out of total 117 malignancies also 1 case of squamous cell carcinoma was found, in year Feb.2018, out of total 30 malignancies also 1 case of squamous cell carcinoma was found.

Conclusion- SCC of the breast is a rare cancer.

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INTRODUCTION

Mammary carcinoma is the most common malignant tumor in women, and it is the leading cause of mortality, with an incidence of >1,000,000 cases occurring worldwide annually. It is one of the most common human neoplasms, accounting for approximately one-quarter of all cancers in females worldwide and 27% of cancers in developed countries with a Western lifestyle.¹

Breast cancer is a heterogeneous entity regarding clinical and imaging presentation and biological behavior. The ductal type is the most common, followed by lobular carcinoma. Together they account for over 70% of carcinomas. Metaplastic tumors, in turn, are rare and represent a heterogeneous group of neoplasms showing dominant areas of non-glandular (spindle cell, squamous, and/or mesenchymal) differentiation.

Etiology and pathogenesis of this type of lesion in the breast is uncertain.¹ It is believed that it arises directly from the epithelium of the mammary ducts, while another theory is that the tumor grows from foci of squamous metaplasia within a pre-existing breast adenocarcinoma.² Another theory defended by Stevenson *et al.* is that the lesion is a disease with varying degrees of squamous metaplasia, representing an extreme form of squamous metaplasia inside the adenocarcinoma.³

MATERIALS AND METHODS

Study design: Hospital based cross sectional study

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Study place: Dept. of Pathology, S.P.Medical College, Bikaner.

Study duration- Jan.2014 to Feb 2018.

Study type: prospective and retrospective hospital base study.

Study population: Patients of breast malignancies.

Study Unit: Tissue specimens obtained from study population

Sampling method: Convenience non-probability sampling.

Sample size: All patients reporting to the Pathology dept. within study duration and eligible as per inclusion criteria were included in the study.

Source of data: All the biopsy or surgically excised specimens and reference material submitted to the Department of Pathology, SPMC, Bikaner for histopathological study during study period.

Data analysis: After entering data into Excel worksheet, it was analyzed with the help of frequency, proportion, mean, standard deviation and tests of significance wherever applicable. Chi-square test was used for p-value calculation. If p-value <0.05 was significant and >0.05 was non-significant.

RESULTS

Table 1 year wise distribution of total breast malignancies

Year	Total breast malignancies	Squamous cell carcinoma
2014	111	1
2015	105	0
2016	117	1
2017	136	0
2018	30	1
Total	599	3

During the year 2014, out of total 111 malignancies 1 case of squamous cell carcinoma was found, in year 2016, out of total

117 malignancies also 1 case of squamous cell carcinoma was found, in year Feb.2018, out of total 30 malignancies also 1 case of squamous cell carcinoma was found.

Out of total 559 case of breast carcinoma 3(0.50%) case of squamous cell carcinoma was found.

DISCUSSION

The pathogenesis of SCC of the breast is not yet fully understood. It might originate directly from the epithelium of the mammary ducts whilst according to Stevenson *et al.* the origin lies within a continuum of different degrees of squamous metaplasia, with SCC being an extreme form, ultimately developing into a carcinoma.^{4,5}

Primary SCC usually clinically presents as an adenocarcinoma, but it can also present as a benign disorder, such as a breast cyst, abscess or mastitis.^{6,7} This warrants a more thorough examination of seemingly benign processes in the breast. There were also reports from SCC's arising from capsules around silicone breast prostheses^{8,9}.

The management of SCC is very challenging for several reasons. Firstly, due to the locally advanced stage at presentation, breast conservative surgery is not recommended.¹⁰ Secondly, adjuvant radiotherapy plays a role in the treatment of locally advanced disease, though there is often locoregional relapse in the irradiated field.¹⁰ Thirdly, many studies regard SCC as an aggressive disease behaving as a poorly differentiated HR negative breast adenocarcinoma.⁴

Hennesy *et al.*³ reported that patients without metastatic disease have a 5-year survival of 40%. Survival is independent of age at diagnosis, race or type of mastectomy, but significantly associated with the tumour stage at diagnosis.

CONCLUSION

SCC of the breast is a rare cancer, associated with locoregional and distant relapses.

References

1. Flikweert ER, Hofstee M, Liem MSL. Squamous cell carcinoma of the breast: a case report. *World J Surg Oncol.* 2008; 6:135.
2. Hennesy BT, Krishnamurthy S, Giordano S, Buchholz TA, Kau SW, Duan Z, *et al.* Squamous cell carcinoma of the breast. *J Clin Oncol.* 2005; 23(31):7827-35.
3. Guerriero G, Zagami MG, Montesano M, Primavera A, Carino R, Battista C, *et al.* Squamous cell carcinoma of the breast diagnosis by vacuum-assisted core biopsy. *Tumori.* 2005; 91(5):418-20.
4. Behranwala KA, Nasiri N, Abdullah N, *et al.* Squamous cell carcinoma of the breast: clinico-pathologic implications and outcome. *Eur J Surg Oncol* 2003;29(4):386-9.
5. Stevenson JT, Graham DJ, Khiyami A, *et al.* Squamous cell carcinoma of the breast: a clinical approach. *Ann Surg Oncol* 1996;3(4):367-74.
6. Capellani A, Di Vita M, Zanghni A, *et al.* A pure primary squamous cell breast carcinoma presenting as a breast abscess: a case report and review of the literature. *Ann Ital Chir* 2004;75(2):259-62.
7. an YM, Yeo A, Chia KH, *et al.* Breast abscess as the initial presentation of squamous cell carcinoma of the breast. *Eur J Surg Oncol* 2002;28(1):91-3.
8. Paletta C, Paletta FX Jr, Paletta FX Sr, *et al.* Squamous cell carcinoma following breast augmentation. *Ann Plast Surg* 1992;29(5):425-9.
9. Kitchen SB, Paletta CE, Shehadi SI, *et al.* Epithelialization of the lining of a breast implant capsule. Possible origins of squamous cell carcinoma associated with a breast implant capsule. *Cancer* 1994; 73(5):1449-52.
10. Hennesy BT, Krishnamurthy S, Giordano S, *et al.* Squamous cell carcinoma of the breast. *J Clin Oncol* 2005;23(31):7827-35.

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