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Short Communication

Pure squamous cell carcinoma breast with lymph node Metastasis: a rare neoplasm

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Abstract

Pure squamous cell carcinoma of breast are exceedingly rare neoplasm with an incidence of 0.1 % to 0.01 % of all breast carcinoma, the incidence of lymph node metastasis in squamous cell carcinoma is still very unusual. This is a case report of a squamous cell carcinoma with lymph node metastasis in a 65 years old female presenting with breast lump. Mammography revealed a lobulated breast mass for which modified radical mastectomy with axillary clearance was done histopathological examination revealed a pure squamous cell carcinoma with metastasis in lymph nodes.

Keywords: Breast carcinoma, Squamous cell carcinoma.

INTRODUCTION

Pure squamous cell carcinoma is included into group of metaplastic carcinoma *by* WHO classification and constitute < 1% of all invasive mammary carcinoma[1]. They are neither derived from overlying skin and nor represent metastasis from other site. Pure squamous cell carcinoma are large, cystic lesion with very low rate of nodal involvement[2,3].This case has been presented to enlighten the onchosurgeon and pathologist of the rare breast neoplasm and pave way to further research in this field

Case report

This report is a case of 65 year old female who presented with history of pain and lump in breast for which mammographic examination was done. Mammography showed a lobulated breast mass. Subsequently modified radical mastectomy with clearance was done. Grossly mastectomy specimen measures 19 x 16 x 6 cms. Overlying skin measures 18 x 14 cms. Nipple and areola were present and show no retraction. Serial section of specimen revealed a tumour mass measuring - 5.5 x 5 x 4 cms. Tumour is seen 0.5 cms below the overlying skin and 1.5 cms above the surgical base of resection. Axillary clearance showed 11 lymph nodes. The entire tumour slice was submitted for histopathological examination and showed a pure squamous cell carcinoma with extensive areas of necrosis (Figure 1). Lymphovascular emboli identified. No glandular differentiation seen. 2 out of 11 lymph nodes examined showed metastatic tumour deposit (Figure 2). Section from overlying skin, nipple and areola were unremarkable. Sections from the surrounding breast tissue showed unremarkable histology. No evidence of inflammatory or fibrocystic change noted in surrounding breast tissue. Since no areas of ductal differentiation were identified, a diagnosis of pure squamous cell carcinoma was offered. An extensive work up of patient was done including examination of her oral cavity, chest-X-ray, pelvic examination and Pap smear, and primary at other site are ruled out.

DISCUSSION

Pure squamous cell carcinoma of breast is very rare with a reported incidence of < 0.1 % to < 0.04 %, of all invasive carcinoma of breast (Gupta et al., 2006; Behranwals et al., 2003; Behranwals et al., 2003). Recent WHO classification has placed these tumours in group of metaplastic carcinoma.[1]It is diagnosed when the malignant cells are entirely of squamous type. Tumour is independent of overlying skin and other primary squamous cell carcinomas are excluded (Siegelmann et al., 2005; Zoltar et al., 2001). The tumours are most often

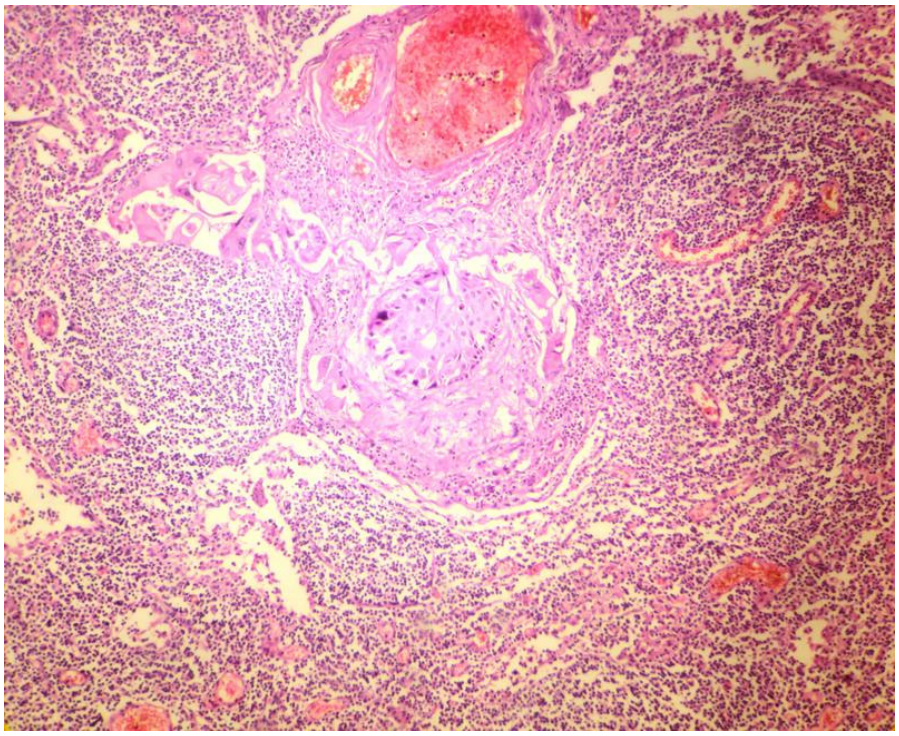

Figure 2. Metastasis of squamous cell carcinoma breast in axillary lymph node (H and E X 10). No glandular differentiation seen. 2 out of 11 lymph nodes examined showed metastatic tumor deposit

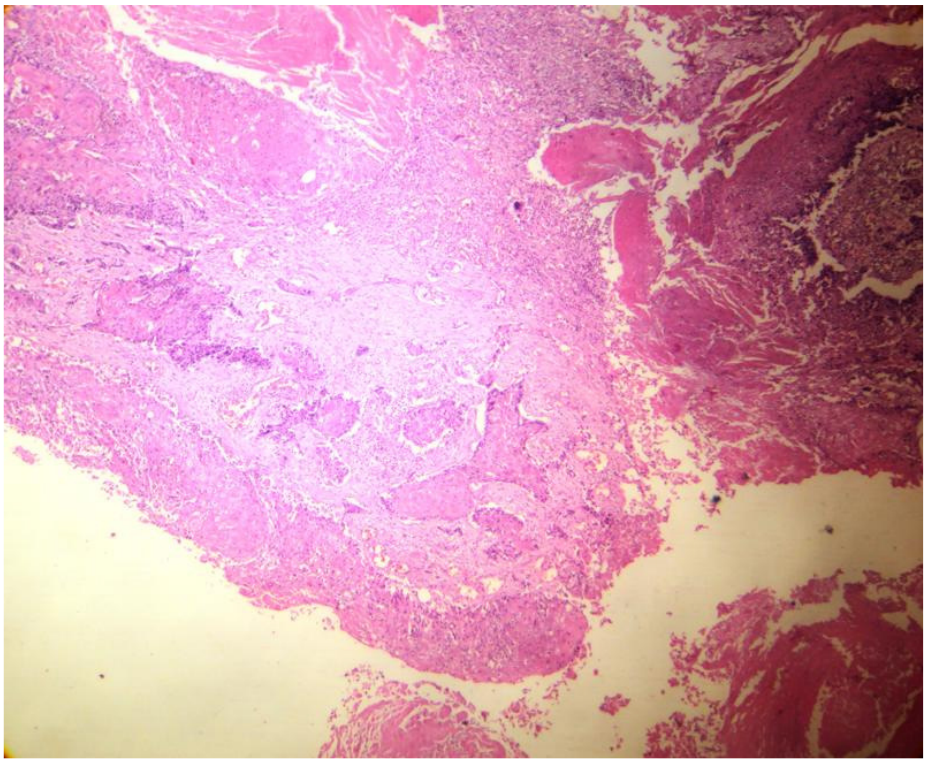

Figure 1. Squamous cell carcinoma breast (H and E X 10). The entire tumor slice was submitted for histopathological examination and showed a pure squamous cell carcinoma with extensive areas of necrosis

seen in postmenopausal women. Clinical presentation is not different from that of infiltrating duct carcinoma. Most patients present with a well circumscribed palpable mass, with a median size of 3 - 4 cm. Cystic changes are observed in 50% of the cases (Stevenson et al., 1996; Gupta et al., 2006). In some reports more than half of these tumours measure over 5cm, with some massive lesions (> 20cm) which may displace the nipple and ulcerate through the skin. In my case patient's age was 65 years and tumour size was 5.5 cms similar to what has been reported earlier.

These tumours are also associated with a significantly lower rate of axillary lymph node metastasis compared to usual ductal adenocarcinoma of the breast. Metastases to axillary nodes in all patients with Primary squamous cell carcinoma have been reported to range from 10% to 30% (Zanconati et al., 1997; Behranwals et al., 2003).

This is unlike cutaneous squamous cell carcinomas that tend to metastasize to regional lymph nodes first. In fact, many authors report that primary squamous cell carcinoma is likely to skip regional nodes and present with distant metastasis, with rates reported in the range of 30-33% (Zanconati et al., 1997; Behranwals et al., 2003).

The prognosis is still a subject of controversy; some reports suggest that it is aggressive, with an outcome comparable to poorly differentiated ductal carcinoma of the breast.

In conclusion, Primary squamous cell carcinoma of the breast is a very rare and aggressive disease .It should be differentiated from usual infiltrating ductal carcinomas with extensive squamous metaplasia as they have a different clinical course.

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