CASE REPORT

Metaplastic Squamous Cell Carcinoma of Breast-An Uncommon Tumor with an Unusual Presentation A Case Report

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ABSTRACT

Metaplastic breast carcinoma is uncommon. Pure Metaplastic squamous cell carcinoma is rare. Usually there is mixed type (adenosquamous) in which few areas show squamous metaplasia. The incidence has reported only 0.1 to 2%.[1] It is a case report of primary metaplastic squamous cell carcinoma. Tumor had no connection with the skin.

Key Words: *Metaplastic, Squamous Cell Carcinoma, Adenosquamous*

CASE REPORT

A 50 year old lady presented with breast lump for 1 year. On palpation the large lump was protruded beneath skin in right breast, it adhered to skin and above skin showed mild ulcerated changes. No lump was palpable in axilla. A biopsy was performed in which it was diagnosed as invasive carcinoma NST (No special type) and prognostic marker status were triple negative mean ER, PR and HER2 negative. Patient modified radical mastectomy with level-II axillary dissection was performed. Grossly mastectomy specimen was 24x14x12cm with ellipse of skin having areola and nipple. There was nodular protruded lump (Figure-1). Cut surface shows a large solid 7cm mass with necrotic and hemorrhagic areas (Figure-2). On Gross examination tumor was not reaching up to any peripheral margin. Sampling according to guidelines were done. Axillary fatty tissue dissection revealed 11 lymph nodes. The largest was 1. 5cm.All lymph nodes submitted for microscopic examination. Histological examination revealed malignant neoplasm composed of nest and islets of polygonal squamous cells. The cells had intercellular bridges and markedly pleomorphic nuclei. Mitotic figures were frequently present. Abundant keratinization was also present. (Figure-3) No tumor area show invasive ductal carcinoma pattern. Even after extensive sampling there was no direct connection of tumor with skin. (Figure-4) No pagetoid spread was seen. Tumor was infiltrating the parenchyma but not reaching up to margins. All lymph nodes were negative for metastatic tumor. It was diagnosed as Metaplastic squamous cell carcinoma. Nottingham score was given 9, Grade III, poorly differentiated carcinoma. Pathological TN staging was pT4, pNX.

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Funding Source: NIL; Conflict of Interest: NIL
Received: May 25, 2021; Revised: November 24, 2021
Accepted: December 04, 2021

Introduction

Pure metaplastic squamous cell carcinoma of breast is rare neoplasm. It arises from glandular component which shows metaplasia to squamous cell carcinoma. It can be differentiated with adenosquamous carcinoma by absence of glandular component. Metaplastic carcinomas are high grade carcinoma, pure squamous cell carcinoma is one of its aggressive forms.

Discussion

Metaplastic carcinoma of breast is rare entity which show variable morphological features of metaplasia in which glandular component is absent or minimal. Metaplastic carcinoma usually exhibit squamous, spindle or mesenchymal differentiation. The current World Health Organization (WHO) classification system for these tumor includes low and high grade adenosquamous carcinoma, fibromatosis like metaplastic carcinoma, squamous cell carcinoma, spindle cell carcinoma and carcinoma with mesenchymal differentiation.[2] Metaplastic carcinomas are triple negative carcinoma. Squamous cell carcinoma is an aggressive form of metaplastic carcinoma. Exact etiology for metaplastic squamous cell carcinoma is unknown but few studies suggest that it arise from metaplastic squamous epithelium.[2] It usually presents clinically as large palpable mass of 3-5cm which is larger as compared to conventional invasive ductal carcinoma.[3] Grossly it show cystic and necrotic areas.[3] Histologically, predominantly exhibit

squamous differentiation with varying degree of keratinization and pleomorphism.

The diagnosis of metaplastic squamous cell carcinoma can be established by evaluating these parameter: i-Origin of tumor from skin, adnexa or nipple should be excluded, ii-More than 90% area must show squamous differentiation, iii- Area other than squamous cells as spindle, ductal or mesenchymal must be excluded by extensive sampling, iv-Metastasis from other site e.g. lung, oral cavity, and cervix should be excluded.

Metaplastic squamous cell carcinoma show poor prognosis with rapid enlargement though lymphatic spread and lymph node involvement is less common as in invasive ductal carcinoma.[4]

Due to rarity of breast metaplastic squamous cell carcinoma the exact management strategy is still not clear.[5,6]

Conclusion

Pure metaplastic squamous cell carcinoma of breast should consider in differential when triple negative carcinoma diagnosed on FNAC or biopsy. Before establishing the final diagnosis of pure metaplastic squamous cell carcinoma of breast rule out metastasis from other sides and primary skin squamous cell carcinoma.

Fig 1-Gross Appearance of Mastectomy Specimen with Large, Protruded Lump.

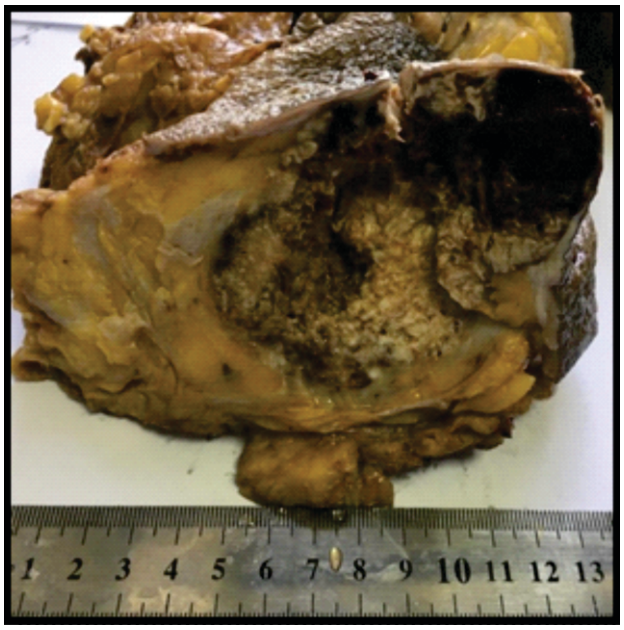

Fig 2: Cut Surface Show Large Necrotic Mass.

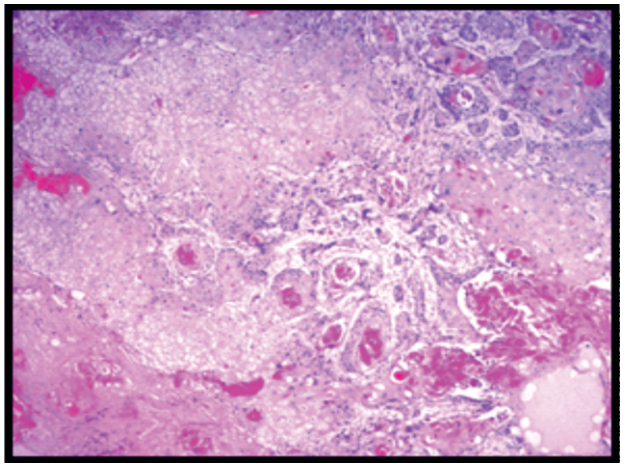

Fig 3: Microscopic Section of Tumor Shows Nest of Squamous Cells with Abundant Keratinization (H&E100 x).

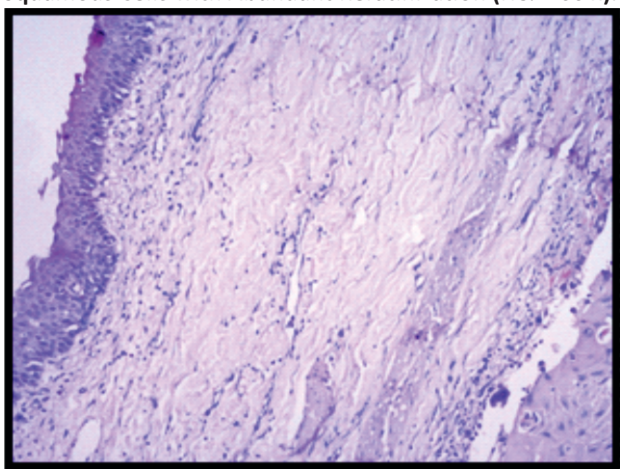

Fig 4: Microscopic section of tumor has no connection with skin (H&E100X).