

**EPIDERMAL INCLUSION CYST IN AXILLARY LYMPH NODE POST LUMPECTOMY:
A RARE CASE REPORT**

Dr. Rajnish Kalra, Dr. Deepika Jain and Dr. Gurupriya*

Haryana India.

*Corresponding Author: Gurupriya J.

Haryana India.

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ABSTRACT

Epidermal inclusion cyst (EIC) in the axillary lymph node is an uncommon finding and may be mistaken for malignancy. A 26-year old female presented with lump in the left breast for 1 month. Mammography was suspicious of malignancy. Lumpectomy followed by histopathology showed infiltrating ductal carcinoma. Modified radical mastectomy was performed, no residual tumour was identified. All the lymph nodes isolated showed reactive hyperplasia with no evidence of metastasis. One of the lymph node showed epidermal inclusion cyst.

KEYWORDS: Epidermal inclusion cyst (EIC).**INTRODUCTION**

Epidermal inclusion cyst (EIC) in the axillary lymph node is an extremely rare condition, which may mimic micro metastasis.^[1] EIC are cysts in which there is implantation of epidermal elements into various other tissues.^[2] EIC can occur anywhere in the body but most common locations include scalp, face, trunk, extremities etc.^[3] EIC is also known as epidermoid, infundibular or sebaceous cyst.^[4] Here we present a rare case of epidermal inclusion cyst in post lumpectomy MRM (Modified Radical Mastectomy) specimen mimicking metastasis from squamous cell carcinoma.

CASE REPORT

A 26 year old female presented to the surgery OPD with a 1 month history of painless lump in the left breast. There were no comorbid conditions and no family history of breast carcinoma. She was nulliparous, and her gynaecological history was unremarkable. On physical examination a firm, relatively mobile lump measuring 3 X 3 cm was noted at 6'o clock position of the left breast. Right breast was unremarkable. No lymph nodes were palpable in the axilla of both sides. Ultrasonography showed a hypo echoic lesion in the 6'o clock position of left breast measuring 2.5 X 2 cm. Mammography showed BIRADS 4, fine needle aspiration cytology was suggestive of carcinoma breast. Lumpectomy was performed in July 2016. Histopathological examination showed Infiltrating duct carcinoma.

Modified radical mastectomy was performed after one month with no immediate post-operative complications. Grossly no definite tumor area was identified. A scar mark was also present below the skin nipple areola

complex. 18 lymph nodes were isolated from the specimen. Micro sections examined from the grey white areas showed fibrocystic disease of the breast and lumpectomy bed showed foreign body giant cell reaction with no residual tumour. All the lymph nodes (18) isolated showed reactive lymphadenitis and were negative for metastasis. One of the lymph nodes showed an epidermal inclusion cyst mimicking metastasis.

DISCUSSION

EIC are a rare finding in axillary lymph nodes.^[2] There are very few case reports of EIC in axillary lymph nodes associated with breast malignancy in literature.^[2,5] EIC in the axillary lymph nodes were first reported in 1957 by Garret and Ada, they found squamous epithelium lined cysts and glandular structures in these lymph nodes.^[6] Implantation origin and Embryonic rest origin theories have been proposed regarding the development of EIC though the exact pathogenesis is still unclear.^[7] Procedures such as Fine Needle Aspiration Cytology (FNAC) and lymph node biopsy are said to accidentally implant the epithelial fragments into the lymph node in the theory of implantation origin.³ Inclusions of the axillary lymph nodes are commonly of epithelial type or nevomelanocytic type.^[6]

EIC are benign most of the time, though they may develop complications such as rapid increase in size, bleeding and spontaneous rupture.^[2] Malignancy is rare in EIC but squamous cell carcinoma may arise in some instances.^[8] Immunohistochemistry is a useful investigation in differentiating benign inclusions from malignant ones, for example nevus cells of nevomelanocytic inclusions may be mistaken for

metastasis from lobular carcinoma. In this case S-100 positivity is demonstrated in nevus cells.^[1]

CONCLUSION

It is important to be aware of the occasional occurrence of non-neoplastic inclusions to avoid misdiagnosis. EIC may co-exist with carcinoma breast metastasis or may be mistaken for a metastatic malignancy.

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