

# Lymphoepithelioma-Like Carcinoma of the Breast: A Diagnostic and Therapeutic Challenge

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**Abstract:** Introduction: Lymphoepithelioma-Like Carcinoma (LELC) of the breast is an extremely rare malignancy with 32 cases reported in the world literature to date morphologically. Case report: A 40-year-old female patient presented with a lump in the right breast since 3 months progressively increasing to present size. Physical examination revealed a lump of 5 x 3 cm which is firm, well defined and mobile in the lower outer quadrant of right breast. FNAC was in favor of medullary carcinoma. MRM was done and sent for HPE, which revealed lymphoepithelioma like carcinoma of breast. Discussion: LELC of the breast is a rare histopathologic variant of breast carcinoma and is not a part of the world health organization (who) classification for breast cancer. Conclusion: Lymphoepithelioma-like carcinoma of the breast is an extremely rare entity with a favourable outcome when treated.

**Keywords:** Lymphoepithelioma-Like Carcinoma of Breast, Lump in the Breast, MRM

## 1. Introduction

Lymphoepithelioma-Like Carcinoma (LELC) of the breast is an extremely rare malignancy with 32 cases reported in the world literature to date morphologically. The tumor resembled nasopharyngeal lymphoepithelioma (old terminology for undifferentiated nasopharyngeal carcinoma. Although Epstein- Barr Virus (EBV) has been linked to the pathogenesis of LELC of the nasopharynx, salivary glands, stomach, and others. It has never been associated with breast LELCS. We present a case of LELC of the breast in a 40yr old female.

## 2. Case Report

A 40-year-old female patient presented with a lump in the right breast since 3 months progressively increasing to present size. The patient did not have associated breast pain skin changes. Nipple discharge or a history of breast trauma,

no history suggestive of metastasis. Her obstetric and menstrual history were non significant. There was no family history of breast or ovarian cancer.

Physical examination revealed a lump of 5 x 3 cm which is firm. Well defined and mobile in the lower outer quadrant of right breast with no visible skin changes. Axillary lymph nodes were not palpable and the left breast was normal. Surgical profile was normal. Right breast ultrasound features accounting to birads 4. The right axilla was sonographically negative for lymphadenopathy. CT thorax, abdomen and pelvis showed no evidence of distant metastasis. FNAC showed single and groups of abnormal elongated cells with visible nucleoli presenting together with lymphocytes and plasma cells in favour of medullary carcinoma. MRM was done and sent for HPE which reveal poorly defined nests and cords of undifferentiated epithelial cells with a prominent lymphoplasmacytic infiltrate (Fig 2, 3). IHC wasn't done. Patient was kept on follow up.



Figure 1

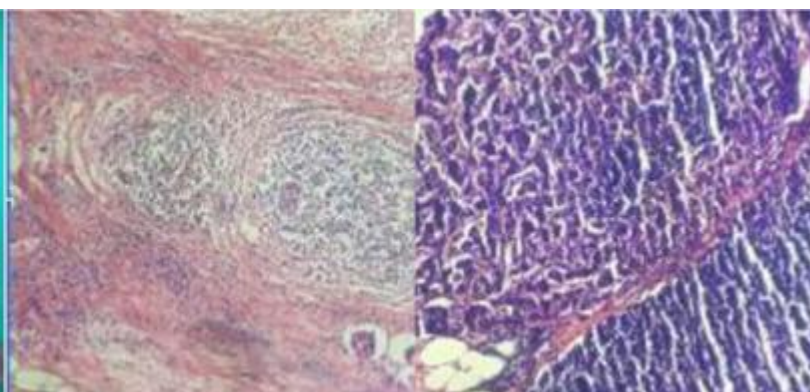


Figure 2

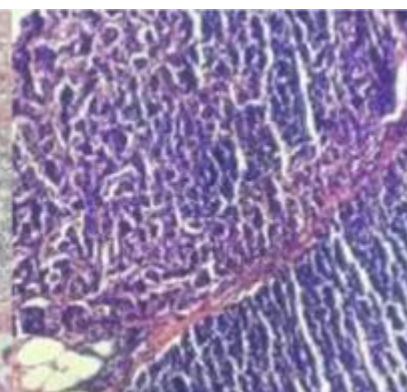


Figure 3

## 3. Discussion

LELC of the breast is a rare histopathologic variant of breast carcinoma and is not a part of the world health organization (WHO) classification for breast cancer. In order to avoid misdiagnosis of LELC of the breast, it is important to consider neoplasms of the breast with evident lymphocytic infiltrate, such as lymphomas and medullary carcinomas. In the differential diagnosis. Many of the reported cases have received adjuvant chemotherapy and radiotherapy. While

hormonal therapy was used for patients with positive estrogen or progesterone receptors. In our case, modified radical mastectomy was done. Although there are a limited number of cases to evaluate the prognosis of LELCS of the breast. It is important to note that after years of follow-up, the majority (27 out of 33) had no evidence of recurrence or metastasis post surgery and therapy. Therefore, LELC of the breast can be considered to have a favorable prognosis. It is necessary to use a panel of IHC markers with cytokeratin

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and leukocyte common antigen to differentiate between lymphomas and Lymphoepithelioma-Like Carcinomas

#### 4. Conclusion

Lymphoepithelioma-Like Carcinoma of the breast is an extremely rare entity with a favourable outcome when treated; therefore, it should be considered when diagnosing breast tumors with a rich lymphocytic infiltrate. We expect to see more cases of LELC of the breast reported in the literature: therefore, well -defined guidelines and criteria for the diagnosis and management of LELC in the breast are warranted.

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