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# Non hodgkin's lymphoma of the breast

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### **Abstract**

Lymphomas of the breast are rare with incidence of 0.12 - 0.5% of all breast malignancies and 2.2% of extra nodal lymphomas 1, 2. Primary breast lymphoma has a reported incidence ranging from 0.04 - 0.5% of malignant breast neoplasms11 of all extra nodal NHL and 0.7% of all NHL12 They are defined as Primary and secondary breast. We report here a case of extranodal lymphoma, a primary Non Hodgkin's lymphoma of the breast in a female patient. The treatment modalities for lymphomas of breast should be same as other lymphomas.

Keywords: non hodgkin's lymphoma, breast lymphoma, primary breast lymphoma (PBL)

### Introduction

Lymphomas of the breast are rare with incidence of 0.12 - 0.5% of all breast malignancies and 2.2% of extra nodal lymphomas <sup>[1, 2]</sup>. They are defined as Primary and secondary breast lymphomas. Primary and secondary lymphomas of the breast are defined primary breast lymphoma (PBL) when breast was the site of first or major manifestation of the lymphoma and there was no documentation of lymphoma elsewhere, excluding the presence of ipsilateral axillary node involvement by Wiseman and Liao's <sup>[3]</sup>. All lymphomas involving the breast but not including these criteria are considered as secondary breast lymphomas (SBLs). Pathologically they are similar <sup>[4]</sup>. Patient's age, Clinical stage and histological type are prognostic indicators <sup>[2]</sup>. We report here a case of extranodal lymphoma, a primary Non Hodgkin's lymphoma of the breast in a female patient diagnosed with histopathology and being followed up at our outpatient department.

## Case report

A 52 yr old female with a history of hysterectomy 5 years back presented to our outpatient department with a lump over the RIGHT chest wall since 15 days, not associated with fever, weight loss or night sweats. Lump was associated with bloody discharge. On further questioning the patient gave history of a RIGHT mastectomy 2 months back. The patient had defaulted the further treatment due to personal reasons. Patient had no history of hypertension, diabetes mellitus, bronchial asthma or tuberculosis. Patient had undergone hysterectomy 5 years back. No other family member had suffered from other malignancy. No history of intake of medications for other ailments. On examination, all vitals were stable no other lymphadenopathy. A lump was noticed at the lateral edge of the old surgical scar of RIGHT mastectomy. A 5x4cm fungating lesion with pus oozing from it. Rest of the surgical scar was healthy. LEFT breast and axilla was normal. While going through the investigations the histopathology of the RIGHT mastectomy revealed Non Hodgkin's Lymphoma with T size 5 x 4cm. We repeated a core biopsy from the lump and advised symptomatic care. Chest X ray PA view was normal. USG abdomen and pelvis was normal. Histopathology of the biopsy confirmed the relapse of Non Hodgkin's Lymphoma. Then the patient was started on CHOP regimen after the 2<sup>nd</sup> cycle of CHOP the lesion presented like a scar replacing the lump. Patient completed 6# CHOP. Now the patient is on regular follow up for last 6 months.

### **Discussion**

Breast Lymphoma is a rare entity. Commonly involved extranodal sites include the stomach, tonsils, lungs, adenoids, skin, small intestine,and testis <sup>[5, 6, 7, 8, 9]</sup>. Reports indicate that Primary Breast Lymphomas are rare because the breast contains less lymphoid tissue <sup>[10]</sup>. Primary breast lymphoma has a reported incidence ranging from 0.04 - 0.5% of malignant breast neoplasms <sup>[11]</sup>

of all extra nodal NHL and 0.7% of all NHL [12]. These tumors appear in teenagers or patients in their 90's, with peak age incidence in sixth decade of life [6, 7, 13, 14]. This did match our patient's age. Bilateral breast lymphomas account for 10% and are usually found during pregnancy [7, 13, 15, 16, 17]. Breast lymphomas tend to be larger than the breast cancers with rapid progression in size [3, 4, 15, 18, 19, 20]. Skin retraction, erythema, local heat, nipple discharge, peau d'orange appearance are not common signs in breast lymphomas [3, 7, 15, 18, 21]. Systemic B symptoms of lymphoma like night sweats, weight loss, and fever are rarely reported [8, 21]. On mammography lymphoma usually shows well defined borders, no microcalcifications and spiculations favouring the diagnosis of lymphoma. All the clinical and radiological characteristics may overlap and histology is diagnostic [3, 5, 22, 23]. The surgical treatments can be a simple mastectomy or modified radical mastectomy with axillary lymph node dissection (ALND) [6, 8, 21, 24]. The treatment of primary Non Hodgkin's lymphoma of breast is similar to that given for systemic lymphomas of similar histological type. Most clinicians agree that multimodality treatment is necessary [6, 25, 26] comprised of wide local excision or mastectomy with lymph node dissection and CHOP regimen of chemotherapy with or without radiotherapy. Chemotherapy without surgery has a good outcome [26]. The risk of CNS relapses in primary breast lymphoma is greater than that has been reported for aggressive nodal Non Hodgkin's lymphoma and is around 5% [27]. The prognosis of breast lymphoma either primary or secondary have been reported as poor as 5-year survival rates being 9 to 85% [6,

**Conclusion:** In our case patient is under follow up without any recurrence. According to our observation, the treatment modalities for lymphomas of breast should be same as other lymphomas with the same stage and histological classification.

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