CASE REPORT

PRIMARY 'B' CELL NHL BOTH BREASTS IN AN ELDERLY FEMALE – A CASE REPORT

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ABSTRACT: Primary breast lymphoma (PBL) is a very uncommon condition having a poor prognosis, that accounts for 0.05-0.53% of all malignant disease of breast and 2.2% of extranodal malignant lymphoma. A 60yrs female presented with shortness of breath and on examination bilateral breast lumps and left axillary lymphadenopathy were found. Further evaluation done and by cytological, histopathological and immunohistochemical (IHC) correlation a final diagnosis of Non Hodgkins Lymphoma (B cell type) was made.

INTRODUCTION: PBL is a very uncommon condition constituting 0.05-0.53% of all malignant disease of breast but it is most frequent hematopoietic tumor of breast.¹⁰

MATERIALS AND METHODS: Fine needle aspiration cytology (FNAC) done under aseptic precautions using 22 gauge needle.

Excision biopsy done under general anaesthesia of both right and left breast lumps and left axillary lymph node.

H & E stain done.

Immunohistochemistry (IHC markers -CD 3, CD 20, CD 30).

Consent –Patient died 4 months back , Consent taken from kin[son]

RESULTS: On examination-bilateral breast lumps and left axillary lymphadenopathy were found. Left breast lump measuring 5x5cm, hard in consistency, in upper central quadrant having restricted mobility.

Right breast lump measuring 2x2cm, hard in consistency, in central quadrant, freely mobile.

Left axillary lymphadenopathy measuring 2.5x2 cm, solitary, firm, mobile.

No generalized lymphadenopathy[cervical, right axilla, inguinal region examined]

Investigations:

Routine investigations done: CBP Hb-9.7gm%,RBC-3.4 million,WBC-7,300/cumm,N-66% L-30% M-2%,E-2%,Platelet-2,76,000/cumm

CUE albumin ++,sugar nil,EC-2-4/hpf, pus cell plenty/hpf

X-RAY CHEST -NAD

ESR first hour-120mm,second hour-140mm

LDH -512 U/l

BLOOD UREA 60mg%

BONE MARROW ASPIRATION-within normal limits

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Sono mammography imp: phyllodes in both breasts, fibroadenomas
Ultrasound abdomen-NAD
FNAC REPORT features of Lymphoproliferative disorder
HISTOPATHOLOGY REPORT-NHL [Non Hodgkins Lymphoma]
IHC MARKERS-CD 20 POSITIVE [B CELL MARKER]
CD3,30 NEGATIVE [T CELL MARKERS]

DISCUSSION: Almost all PBL have a 'B' cell phenotype, 'T' cell phenotype being rare. [Associated with breast implants]¹

Diagnostic criteria for Primary Breast Lymphoma ^{3,4,11} by Wiseman and Lao in 1972.

1. Presence of technically adequate pathological specimen.
2. Close association of mammary tissue and lymphomatous infiltrate.
3. No prior diagnosis of extramammary lymphoma.
4. No evidence of concurrent widespread disease except for ipsilateral axillary lymph node.

Most common symptom of PBL a palpable breast lump followed by palpable lymph nodes ¹¹, radiological appearance² is usually of breast carcinoma/ fibroadenoma/ cystosarcoma phyllodes and sonological findings^{5,6,11} are usually a single, circumscribed, microlobulated, oval mass and hypoechoic lesions.

TREATMENT: Appropriate treatment guidelines not identified because of limited data available.

Mastectomy does not have any benefit ¹¹, main treatment modality chemotherapy ⁷Local irradiation can be helpful by increasing local control ^{7,11} rate.

(CHOP cyclophosphamide, hydroxyurea, vincristine, prednisone)⁸

CONCLUSION: Primary breast lymphoma (PBL) is a very uncommon condition having a poor prognosis that accounts for 0.05-0.53% of all malignant disease of breast and 2.2% of extranodal malignant lymphoma. This case is being presented for its rare occurrence.

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Fig. 1: Cytology smears showing monomorphous population of lymphocytes

Fig. 2: HPE section-NHL

Fig. 3: IHC CD 20 positive

Fig. 4: IHC CD 30 negative

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Fig. 5: IHC CD 3 negative

Fig. 6: Peripheral smear-NAD

Fig 7: Bone marrow aspiration smears- NAD

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