

## Letter to the Editor-II

# Primary Non-Hodgkin's Lymphoma of Breast

Sir,

Primary non-Hodgkin's lymphoma (NHL) of the breast is rare and accounts for 1.7 - 2.2% of extra nodal NHL.<sup>1</sup> At presentation most patients are clinically thought to have breast carcinoma and the diagnosis of lymphoma is made at histopathology. We report a case of NHL of breast in a young unmarried female.

**Case:** A 20 year unmarried female from an urban area of Kashmir presented with gradually increasing swelling of left breast of one month duration with no constitutional symptoms. Local examination of the left breast revealed a lump of 8 x 7 cm in upper, outer quadrant and left axillary lymph node of 3x4 cm in size. Rest of the systemic examination was within normal limits. Investigations: Hb 9.6 gm/dl, with normal total and differential WBC and platelet count. ESR 53mm in 1st hour. Liver and kidney function tests-normal, LDH-520 U/L (normal 240-420 units/L) and cerebrospinal fluid examination normal. FNAC of the breast swelling suggestive of NHL (Figure 1). Histopathology axillary lymph node (Figure 2) revealed B-cell NHL positive for CD20 (DLBCL). Chest X-Ray and US of Scan abdomen were normal. Bone marrow aspiration and biopsy did not reveal any infiltration. She received 6 cycles of chemotherapy using CHOP regime (Inj. cyclophosphamide 750 mg/m<sup>2</sup> D1, Inj. Doxorubicin 50 mg/m<sup>2</sup> D1, Inj. Vincristine 1.4 mg/m<sup>2</sup> (max. 2 mg) D1, Tab. Prednisolone 100 mg OD for 5 days) every three weeks and showed good response with mass disappearing after 2 cycles of chemotherapy. She also received CNS prophylaxis in the form of triple intrathecal chemotherapy. On follow up, she continues to be in remission for last two years.

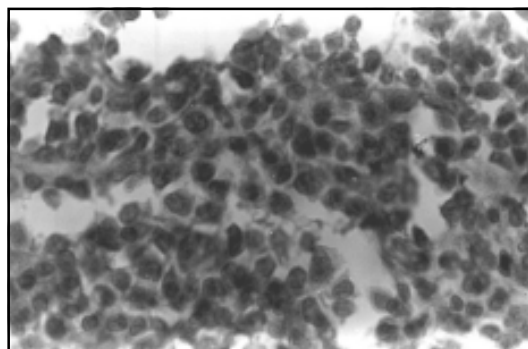


Figure 1. FNAC breast lump showing monotonous non-cohesive lymphoid cells with irregular nuclear contours (400x)

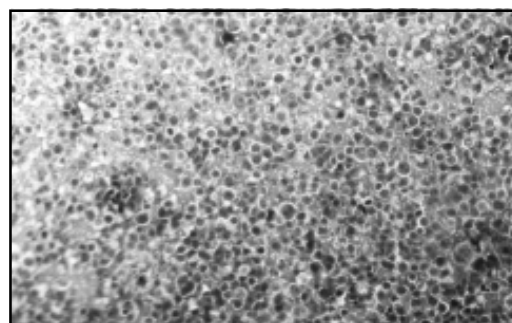


Figure 2. Lymph node biopsy showing large lymphocytes with prominent nucleolus, scanty cytoplasm and monotonous population of non-cohesive cells suggestive of diffuse large cell lymphoma. (H&E, 400x)

### Comments

Present case was diagnosed as diffuse large B cell non Hodgkin's lymphoma (DLBC). She achieved complete response following CHOP chemotherapy and later received radiation and CNS prophylaxis. Due to rarity of this disease, experience from individual centres is limited. Only few cases have been reported from India.<sup>1-3</sup> A brief review of English literature (table-1) suggests that similar to breast cancer, most cases occur in women of middle age with disease localized to breast (stage IE) or with ipsilateral axillary lymph nodes (stage IIE).<sup>4-10</sup> Clinically it

**Table-1 Review of Literature**

| Author<br>(period of study)                   | No of patients              | Histopathology   | Treatment  | Outcome   |
|---|-----------------------------|--|--|---|
| Park et al,<br>(1989-2002) <sup>4</sup>       | 9<br>(Median age 45 Y)      | DLBC-7, marginal<br>zone-1, SLL-1                            | MRM+CT+/-RT-5,<br>MRM alone-1<br>CT-RT-1<br>CT-1, RT-1 | CR-9/9,<br>Median OS-12<br>months   |
| Babovic et al<br>(1984-96) <sup>5</sup>       | 10<br>(Median age=58 Y)     | DLBC-6, diffuse<br>mixed-2, SLL-2                            | Mastectomy-4, wide<br>local excision-1,<br>CT-8        | estimated<br>10 Year OS<br>=60%   |
| Lyons et al<br>(1980-96) <sup>6</sup>         | 17 (13 evaluable)           | NA   | DLBC-CT+RT<br>Indolent-RT alone                        | NA  |
| Topalovski et al <sup>7</sup>                 | 11                          | DLBC-5, indolent-4,<br>not specified-1                       | NA   | NA  |
| Barista et al<br>(1973-97) <sup>8</sup>       | 12                          |  | MRM-5, RT-8/9  | Median PFS-49<br>mon, median<br>OS-56 mon                                   |
| Gholam et al<br>(25 year period) <sup>9</sup> | 25 (20 evaluable)           | 20/20 B cell<br>(including one-<br>Burkitt's,<br>2 indolent) | NA   | 16/20 CR<br>2-PR, 2-prog<br>dis.<br>CNS relapse main<br>cause of<br>failure |
| Abbondanza et al<br>(1973-85) <sup>10</sup>   | 31 (mean age<br>58.2 years) | All DLBC   | NA   | Median OS 36<br>months  |

DLBC- diffuse large B cell, SLL- small lymphocytic lymphoma, CT-chemotherapy, RT-Radiotherapy, MRM-modified radical mastectomy, CR- complete response, PR- partial response, OS- overall survival, NA - not available

may be indistinguishable from breast cancer atleast in early stage. DLBC is most common histologic subtype (>90%) followed by indolent lymphoma and all are 'B cell' type. While many patients in earlier series (1980's) have undergone mastectomy (simple or modified), followed by chemotherapy and radiotherapy, patients in recent studies have been treated mainly with chemotherapy and radiotherapy after biopsy. In present case fine needle aspiration biopsy from breast mass was positive and biopsy from axillary lymph node confirmed DLBC NHL. Despite localized disease, long term outcome remain poor. CNS relapse remains the major cause of failure<sup>9</sup>. Patients with indolent NHL can be treated with radiotherapy alone. Our patient had received CNS prophylaxis and continues to remain disease free at 2 years follow

up. Role of anti CD20 monoclonal antibody (mabthera) remains ill defined. But taking clue from nodal NHL, it appears that use of R-CHOP may be a reasonable approach.

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