Bilateral primary breast lymphoma (PBL); case report

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Introduction
Extranodal lymphomas account for 10–40% of all malignant Lymphomas [1]. The most common anatomic site of a primary extranodal lymphoma is the gastrointestinal tract (stomach and ileocecal region), but virtually any extranodal location may be a primary site including the skin, CVS, bone, testis, soft tissue, thyroid, etc.

Primary breast Lymphomas (PBL) account for 1.7% to 2.2% of extranodal Lymphomas, 0.04% to 1.1% of breast neoplasms, and 0.38% to 0.7% of non-Hodgkin's Lymphomas [2, 3, 4].

The predominant pathologic type of PBL is diffuse large B-cell Lymphomas, but other types can be found [3, 5, 6].

The median age of patients diagnosed with PBL is between 40 and 67 yr, but the range is broad; thus, these tumors can appear in teenagers or patients in their 90’s, the peak age incidence usually is during the sixth decade [7, 15].

All published series reported an overwhelming female predominance [7-9].

The clinical presentation of lymphoma in the breast is similar to other breast malignancy, with a single or multiple painless masses in breast parenchyma. About 13% of patients have bilateral breast involvement. Axillary nodes are involved in 30-40% of cases. Radiographic imaging features of PBL are nonspecific, with the exception that calcifications are rare [10, 11].

In the past, radical mastectomy with postoperative irradiation to the chest and regional nodes was widely used for treatment. Because these tumors respond readily to radiation and to chemotherapy, it seems that these patients could be managing with biopsy or local exision followed by radiation or chemotherapy, usually both.

The role of surgery in PBL should be limited to acquisition of adequate material for diagnosis, typically with a biopsy either from the breast mass or from an involved lymph node. Treatment by mastectomy offers no survival benefit or protection from recurrence [3].

Systemic chemotherapy with rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone (RCHOP) is currently the standard of care for patients with diffuse large B-cell, and this regimen should be used in patients with PBL as well [12-14].

We report a patient with PBL and solitary pancreatic mass.

Case Report
A 17-year-old girl was referred to Iranian Center for Breast Cancer surgery clinic because of bilateral painless breast mass in November 2006. Family history was negative for breast cancer. Physical exam of the breasts showed bilateral breast mass with irregular margins. The mean...
Bilateral primary breast...  66
  
diameter of the masses was 5cm. There 
was no palpable lymphadenopathy. 
Ultrasoundography revealed bilateral breast 
masse suspicious to phyllodes tumor. An 
exisional biopsy of the breasts mass was 
performed. The pathology report was 
malignant lymphoma, large B cell type 
with involvement of surgical margins in 
parts. The patient underwent staging 
procedures including ultrasoundography and 
CT-Scan of chest, abdomen and pelvic and 
bone marrow aspiration. There was a well 
defined mass; 2.5 cm was detected in body 
of pancreas. There was no evidence of 
metastases in other organs. 
The patient was referred for chemo– 
radiotherapy. She received combination 
chemotherapy CHOP (cyclophosphamide, 
doxorubicin, vincristine and prednisone). 
After two course of chemotherapy the 
pancreatic mass disappeared. At the end of 
forth cycle she developed severe headache, 
vomiting and diplopia due to increase of 
intracranial pressure. Computerized 
tomography of brain was normal without 
space occupied lesion. The patient 
underwent lumbar puncture. Cytology 
report showed atypical lymphoid cells. 
Intravenous high dose dexamethason 
started and the patient symptoms 
improved. Because of probable central 
nervous system involvement the patient 
candidate for eight cycle chemotherapy. 
General condition of the patient was poor, 
and she suffered from oral ulcers, loss of 
appetite, headache, nausea and vomiting. 
After six course of chemotheraphy, 
echimotic lesions due to thrombocytopenia 
and perianal abscess worst the patient 
condition. She was admitted in hematology 
ward for antibiotic therapy and perianal 
abscess drainage. Unfortunately after two 
days the patient was died due to septic 
shock. 

Conclusion 
Primary breast Lymphomas is rare 
compared with primary breast carcinoma. 
Because of its low incidence, malignant 
lymphoma rarely is considered in the 
preoperative evaluation of patients with 
breast tumors. Furthermore, according to the 
literature, there are no specific clinical or 
radiological findings that can lead the 
clinician to suspect a lymphoma 
preoperatively (15-19).So, it should be 
considered in the differential diagnosis of 
breast masses. 

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