BILATERAL PRIMARY BREAST LYMPHOMA: A RARE CASE

İbrahim Yetim1, Tülin Durgun Yetim2, Orhan Veli Özkan3, Güvenç Diner1, Nazan Savaş5, Ramazan Davran4, Rahmi Helvacı3, Hasan Kaya3
1Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Tıp Fakültesi, Genel Cerrahi Anabilim Dalı, Antakya, Hatay, Türkiye
2Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Tıp Fakültesi, Göğüs Cerrahisi Anabilim Dalı, Hatay, Türkiye
3Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Tıp Fakültesi, Dahiliye, Hatay, Türkiye
4Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Tıp Fakültesi, Radyoloji Anabilim Dalı, Hatay, Türkiye
5Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Tıp Fakültesi, Halk Sağlığı Anabilim Dalı, Hatay, Türkiye

ABSTRACT
Primary non Hodgkin’s lymphoma of the breast is rare. Bilateral involvement of the breasts is even more rare. Lymphomas are divided into two groups: Hodgkin’s Lymphoma and non Hodgkin’s lymphoma. Diffuse large cell non Hodgkin’s lymphoma is the most common type. A 56 year old female presented with masses in both breasts. An excisional biopsy was obtained from both tumoral masses. Histopathological assessment revealed diffuse large cell non Hodgkin’s lymphoma and chemotherapy was started. Here we present the case of bilateral primary breast lymphoma while discussing clinical characteristics, treatment modalities and the outcomes.

Key words: breast lymphoma, chemotherapy, excisional biopsy

Introduction
Lymphomas are rare entities among the primary malignant tumours of the breast. Most lymphoma cases of the breast originate from metastasis from diffuse lymphomas (secondary lymphoma) whereas primary lymphomas are rare. We present a rare case of bilateral primary lymphoma of the breast followed by a brief review of the clinical characteristics and pathological findings.

Case report
A 56 year old woman presented with tumoral masses in both breasts. Physical examination confirmed a 5 cm tumoral mass in the left breast and 3x1,5 cm sized mass in the right breast. Bilateral axillary lymph nodes were palpable and 1x1,5 cm sized lymph nodes were detected in the both axillae. Biochemical analysis of the blood was normal. Lactate dehydrogenase levels were in normal ranges. Ultrasound of the breasts revealed a 35 x19 mm sized, heterogenous, lobulised, solid mass located in the middle medial quadrant of the left breast. There were four other solid lesions located in the axillary tale of the left breast of which the biggest was 35 mms. There was a 35x15 mms sized, heterogenous, solid tumoral mass on the inferior lateral quadrant of the right breast. Mammography confirmed the presence of the described lesions in both breasts with axillary lymph nodes (Figure 1). Excisional biopsy was performed on both breasts under local anesthesia. Histopathologic assessment revealed diffuse non Hodgkin’s lymphoma (Figure 2). Whole body scan showed that lypohma was limited to the breasts and there was no other involvement in any other localisation of the body. So the clinical diagnosis was bilateral primary lymphoma of the breast.

Histopathological assessment of the samples showed atypical lymphoid xcells with pleomorphic and hyperchromatic nuclei and significant nucleoli. Tumour cells with atypical mitosis and pleomorphic nuclei surrendered the ducts and acini. Immunologic exa-mination showed that tumour cells were CD45RA and CD79a (+).

After the diagnosis of diffuse non Hodgkin’s lymphoma was made, the patient was started on CHOP (cyclophosphamide- doxorubicine- vin christine- prednisolone) treatment. After two doses of chemotherapy; masses in both breasts and lymph nodes in bilateral axillae grossly disappeared. The patient was uneventful and in control after 6 months.

Discussion
Primary lymphoma of the breast is a rare entity. Most of the primary lymphomas of the breast are non Hodgkin’s lymphoma (1).
However, among the metastatic malignancies of the breast, lymphomas are the most common group (4,5). Our case is the non Hodgkin’s lymphoma of the breast, consistent with most of the primary lymphomas of the breast (10,11,14). Diffuse large cell non Hodgkin’s lymphoma, as seen in our case, is the most common subtype and accounts for 40-70% of all the cases (1,4,5,10). They are likely to have a high grade and poor prognosis. Incidence increases with advanced age. All of the primary lymphomas of the breast are B cell lymphomas (13,14).

To confirm the B cell nature of the tumour, cells should be stained with B cell markers (12). In the present case cells were stained with CD45RA and CD79a, which are known as B cell markers.

Lymph nodes of the breast are located on the upper lateral quadrant, among the lymphatic channels, near the axilla. It is proposed that lymphoid hyperplasia occurred in these lymphoid tissues. In breast lymphomas, involvement of the right breast localisation of the tumour in the upper lateral quadrant is more common. However there is not a precise explanation for this mechanism (7,8).

Clinically the patient presents with solitary or multiple masses in the breast. Axillary lymphatic involvement is possible. Bilateral axillary involvement is detected in 30% of the patients with breast lymphoma. In some of the patients there may be thickened skin due to retrograde edema. In our case the patient presented with bilateral multiple masses and axillary lymphadenopathies.

Ultrasoundography usually shows an irregular, lobulised, homogenous or heterogenous mass with high distal acoustic image. Mammography can reveal solitary or multiple, regular masses which can be in different sizes without calcification as in our case.

In breast lymphoma it is not obvious how the size of the tumour effects the prognosis.

Treatment modalities in non Hodgkin’s Lymphoma of the breast are chemotherapy, radiotherapy and autologous bone marrow transplantation. Wrong surgical interventions are performed in some cases in which histopathologic diagnosis is not made preoperatively but is made peroperatively with frozen.

Lymphoma should always be considered in patients with mass of the breast and bilateral axillary involvement (1,8,9). Therefore, before performing radical surgery of the breast tumours, histopathologic diagnosis should be made as much as possible. By this way unnecessary mastectomies can be prevented.

References


