Primary Breast Lymphoma Treated with R-CHOP Chemotherapy

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ABSTRACT

Primary breast lymphoma is rare disease which is treated with surgery, radiotherapy and chemoterapy. There is little experience of rituximab treatment is in breast lymphoma. Here we present a case of primary breast lymhoma treated with rituximab and chemotherapy combination. A 58-year-old woman referred for left breast mass. Radiologic imaging showed a mass of 4 cm in diameter. Pathologic examination of excisional biopsy specimen revealed Diffuse Large B Cell Lymphoma with CD20 positivity. The patient was stage IE (Ann Arbor). Mastectomy, lumpectomy or axillary dissection were not performed. Six courses of R-CHOP (CHOP plus rituximab) chemotherapy and radiotherapy were given. The complete response was obtained. The patient has been followed for 36 months with no evidence of disease recurrence. This is one of the first cases treated with rituximab. She has been followed for more than 36 months without relapse.

Key Words: *Breast lymphoma, rituximab, extranodal non-Hodgkin lymphoma.*

INTRODUCTION

Primary breast lymphoma is uncommon and accounts for 1% of breast malignancies and lymphomas (1). Extranodal lymphomas has been treated with surgery, radiotherapy and chemotherapy. In this paper, we presented a primary breast lymphoma case with long disease free survival who was treated with R-CHOP chemoterapy without mastectomy.

CASE REPORT

A 58-year-old woman was admitted to hospital with left breast mass. Physical examination revealed a mass in the left breast. Mammography demonstrated malign process. Ultrasonography (US)

showed a demarcated hypoechoic mass of 4 cm in diameter. The excisional biopsy was carried out. Pathologic examination releaved Diffuse Large B Cell Lymphoma (DLBCL). CD20 expression was determined to be positive by immunohistochemistry. Axillary lymph node enlargement was not detected with computed tomography and ultrasonographic examination. Fluor-18-fluorodeoxyglucose - positron emission tomography (FDG-PET) was not releaved FDG uptake in other sites of body. The patient was stage IE (Ann Arbor). Lactate dehydrogenase was normal. International prognostic index (IPI) score was zero. Mastectomy, lumpectomy or axillary dissection was not performed. Six courses of R-CHOP (cyclophosphamid, doxorubicine, vincristine, prednisolon plus rituximab) chemotherapy and involved field radiotherapy were given. The complete response was obtained. The patient has been followed for 36 months with no evidence of disease recurrence.

DISCUSSION

Primary extranodal lymphomas are frequently gastrointestinal lymphomas. Skin, central nervous system (CNS), bone, testis, soft tissue, and thyroid lymphomas are uncommon. Primary breast lymphoma is rare. It accounts for less 1% of breast neoplasms and comprises approximately 2% of localized extranodal non Hodgkin lymphomas (NHL) (1-5). The median ages are between 40 and 67 in reports about primary breast lymphoma.

International Extranodal Lymphoma Study Group (IELSG) reported prognostic factors and outcomes of primary DLBCL of the breast (1). The patient characteristics of disease are well described. The majority of the patients are older than 60 years, and have IPI score of zero, normal LDH level but not B symptom, axillary nodal involvement (1).

IPI scoring, antracycline-containing chemotherapy, radiotherapy are prognostic factors. The benefit of extented surgery is not demonstrated. B symptoms, tumour diameter, and nodal involvement are not prognostic factors (1).

In literature, the studies about primary breast lymphomas report outcome of chemotherapy without rituximab. Experience of rituximab treatment is not enough. Our unique case was treated with R-CHOP, a rituximab containing regimen, chemotherapy. The patient is without relapse in the 36th month after chemotherapy and radiotherapy. In IELSG study, first progression sites were breast, regional lymph nodes, CNS. The majority of disease relapse is occured in first tree years. Consequently, the case is one of the first cases treated with rituximab and she has been disease free for 36 months.

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