A Different Presentation of Hodgkin's Lymphoma; Eosinophilia and Inguinal Localized Giant Mass

Hodgkin Lenfoma Olgusunda Farklı Presentasyon; Eozinofili ve Dev İnguinal Kitle; Olgu Sunumu

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Abstract
Hodgkin's Lymphoma is a tumor that comprises fewer malignant Hodgkin, Reed-Sternberg cells and variants in the tumor tissue (1-2% of all cells) different from the other hematological and solid tumors. Most of the tumor mass is composed of reactive inflamatory cells (T-B lymphocytes, eosinophils, plasmocytes, mastocytes and neutrophils), stromal cells and connective tissue surrounding the tumor cells. Among them, eosinophils frequently infiltrate Hodgkin's Lymphoma tissues and the peripheral blood eosinophilia is also a well recognised feature (15%) of this disease. However the prognostic importance of this is still controversial. In the literature some of the studies have reported that eosinophilia has no prognostic significance in Hodgkin's Lymphoma. However some of them claimed that selective eosinophilia without generalised leucocytosis provided clear survival advantage especially in patients with disseminated disease. Here we report a case diagnosed as Hodgkin's Lymphoma, mixed cellularity type, presenting with a large mass localized in the inguinal region accompanying with tissue and peripheral blood eosinophilia with generalised leucocytosis who had a good survival .

Keywords: Eosinophilia, giant mass, Hodgkin lymphoma

Özet
Hodgkin Lenfoma diğer hematolojik ve solid tümörlerden farklı olarak az sayıda (tüm hücrelerin %1-2'si) malign hücre yani Hodgkin, Reed-Sternberg hücreleri ve varyantlarını içeren bir tümördür. Tümör kitlesinin çoğunluğu, tümör hücrelerini saran reaktif inflamatuar hücreler (T-B lenfositler, eozinofiller, plazmositler, mastositler ve nötrofiller), stromal hücreler ve konnektif dokudan oluşur. Bu hücrelerden eozinofiller en sık olarak Hodgkin Lenfoma dokusunu infiltre eden hücrelerdendir. Hastanın Periferik kanında eozinofili ise bu hastalığın sık görülen (%15) özelliklerinden biridir. Ancak bu bulgunun prognostik önemi hala tartışmalıdır. Literatürde bazı çalışmalar Hodgkin Lenfoma'da eozinofilinin prognostik bir öneminin olmadığını bildirmişler. Ancak diğer bazı çalışmalarda ise özellikle yaygın hastalığı olan hastalarda; genel lökositoz olmaksızın görülen selektif eozinofilinin sağkalıma belirgin olarak olumlu etki yaptığı bildirilmektedir. Bu nedenle burada Mikst selüler tip Hodgkin Lenfoması inguinal bölgesinde dev bir kitle halinde ortaya çıkan, genel lökositozu olmaksızın belirgin periferal kan eozinofilisi ve doku eozinofilisi bulunan ve iyi bir sağkalıma sahip olan bir hastamızı sunmaya değer bulduk.

Anahtar kelimeler: Dev kitle, eozinofili, Hodgkin lenfoma

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Introduction

Hodgkin's Lymphoma (HL) is a tumor that comprises fewer malignant Hodgkin, Reed-Sternberg (HRS) cells and variants in the tumor tissue (1-2% of all cells) different from the other hematological and solid tumors. Most of the tumor mass is composed of reactive inflammatory cells (T-B lymphocytes, eosinophils, plasmocytes, mastocytes and neutrophils), stromal cells and connective tissue surrounding the tumor cells (1,2). Among them, eosinophils frequently infiltrate HL tissues and the peripheral blood eosinophilia (PBE) is also a well recognized feature (15%) of this disease (3). Here we report a case diagnosed as HL, mixed cellularity type (MCT), presenting with a large mass localized in the inguinal region accompanying with tissue and PBE.

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Case

A 43-year-old male was admitted to our hospital with a rapid growing mass (14 cm in diameter) in his inguinal region within 3 months and beginning of night sweatings, fever and weight loss at the same time. His mass excised was composed of conglomerated lymph nodes that had a massive inflammatory stromal reaction very rich in eosinophils. As HRS cells and its variants staining positive with CD15, CD30 and EMA were determined, the lesion was diagnosed as HL-MCT (Figure 1).

He had no other palpable mass, however in his laboratory examination, he had leukocytosis (WBC:55.5x10^9/L) with marked eosinophilia (85%) which was also seen in his peripheral blood smear and tumoral bone marrow. There were many lymphadenopathies in iliac, paraaortic, paracaval and presacral regions in his Computed Tomography and lesions in many vertebrae and scapulas compatible with tumor infiltrations in his Magnetic Resonance Imaging. The disease was thought to be Stage 4A (with bone marrow involvement) and the treatment of ABVD [Doxorubicine (25mg/m^2),

Bleomycin (10mg/m^2), Vinblastin (6mg/m^2), Dacarbasine (375mg/m^2)] was planned in 1st and 15th days of the 28 days cure. In the 7th day of the 1st cure, leukocytosis and eosinophilia regressed to $6.3x10^9$/L and 5%. After the 2nd cure, more than 50% metabolic, anatomic response was observed in his PET-CT and radiotherapy was planned to the tumoral tissues following 6 cure of ABVD therapy. He's well, waiting for his 3rd cure.

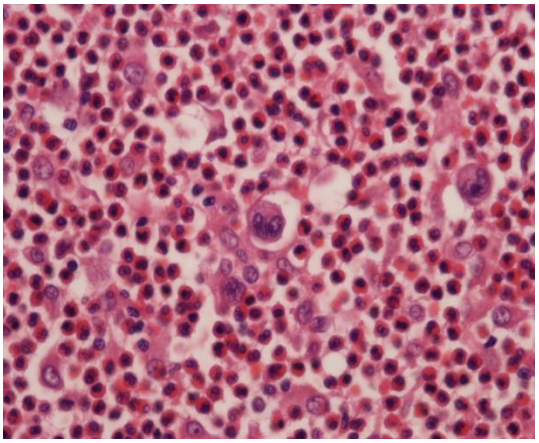

Figure 1. Reed-Sternberg (HRS) cells and variants and massive tissue eosinophilia in the lymph node with Hodgkin's Lymphoma (mixed cellularity type) infiltration. (H&E, x400).

Discussion

It had been known for a long time that eosinophils, one of the reactive inflammatory cells of host response in HL, can be determined intensely in some tumoral lymph nodes (3). However the prognostic importance of this is still controversial. It is reported in many studies that eosinophilia has no prognostic significance in HL (4-6) and also in Non-Hodgkin Lymphoma (7).

PBE can be seen in two different forms. BLNI (British National Lymphoma Investigation) Report No31 pointed out that in about 51% of the HL patients, eosinophilia was an element of generalized leukocytosis (GL) and selective eosinophilia (SE) without GL was seen in 49%. It was reported that eosinophilia accompanying GL didn't affect prognosis positive; however SE without GL provided clear survival advantage especially in patients with disseminated disease (1,2). Although our patient had giant inguinal mass unexpected in HL, and PBE and tissue eosinophilia with GL camouflaging the main disease; we insisted to expose HRS cells and variants by repeating the immunohistochemical studies and diagnosed it as HL. We received a very well response to treatment in spide of GL. We all hope he will have better survival.

Informed Consent: Written informed consent was obtained from patient who participated in this case (08.08.2014).

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