

DIFFUSE LARGE B CELL LYMPHOMA PRESENTED WITH MASSIVE THYROID GLAND ENLARGEMENT AND RESEMBLING THYROID CANCER**MASİF TİROİD BEZİ BÜYÜMESİ İLE PRESENTE OLAN VE TİROİD KANSERİNİ ANDIRAN DİFFÜZ BÜYÜK B HÜCRELİ LENFOMA**Nebiyе YAPICI¹, Fatih KARAAHMET², Murat KEKİLLİ³**ABSTRACT**

Diffuse large B cell lymphoma (DLBCL) is the most common non-Hodgkin lymphoma in adults. It accounts for about 30-58% of all Non-Hodgkin lymphomas. The disease often presents as a rapidly growing nodal or extranodal mass with systemic symptoms. It can be presented with a life-threatening emergency such as a sudden neck swelling. We aimed to present a case of neck swelling that was presented at the age of 81 with sudden neck swelling and dyspnea, to whom an urgent tracheostomy was performed.

Keywords: *Diffuse Large B Cell Lymphoma, Thyroid Gland, Massive Enlargement*

ÖZET

Diffüz büyük B hücreli lenfoma (DLBCL), Non-Hodgkin lenfomalar arasında erişkinlerde en sık görülen lenfomadır. Tüm Non-Hodgkin lenfomaların yaklaşık % 30-58'ini oluşturur. Hastalık çođunlukla sistemik semptomlarla birlikte, hızlı büyüyen nodal veya ektranodal kitle şeklinde ortaya çıkar. Ani boyun şişliđi gibi hayati tehlike oluşturabilecek acil bir durum ile karşımıza gelebilir. Biz 81 yaşında ani boyun şişliđi ve dispne ile başvuran, acilen trakeostomi açılan bir boyun şişliđi vakasını sunmayı amaçladık.

Anahtar kelimeler: *Diffüz büyük B hücreli lenfoma, tiroid bezi, masif büyüme*

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INTRODUCTION

Thyroid cancer is the fifth most common cancer in women around the world, and an estimated over 62000 new cases occurred in men and women in 2015. Differentiated thyroid cancer is the most frequent subtype of thyroid cancer. Other -rare subtypes of thyroid cancer- patients present with medullary, anaplastic cancers and lymphoma (1).

The neoplastic causes of massive neck swelling and life threatening condition are associated with anaplastic thyroid cancers and diffuse large B cell lymphoma (DLBCL). DLBCL is the most common form of NHL, accounting for 22 percent of all B cell lymphomas. Although slightly more common in men than women, DLBCL occurs in both men and women. Its incidence usually increases with age and about half of the patients are over 60 years of age. DLBCL is an aggressive lymphoma that can occur in lymph nodes or outside the lymphatic system (gastrointestinal system, testes, thyroid, skin, breast, bone or brain) (2). We aimed to present an 81-year-old patient with a rapidly expanding thyroid gland and neck swelling related to DLBCL.

CASE PRESENTATION

An 81 years-old woman presented with three months history of dyspnea, neck swelling and rapidly enlarging thyroid gland. The patient has a history of hypothyroidism and she was under levothyroxine replacement treatment. On physical examination, she was afebrile, with a blood pressure of 133/66 mmHg, and a pulse of 92 beats per minute. The thyroid gland was visible on inspection. Complete Blood Count showed a white-cell count of 10.810/mm³, the hemoglobin level was 12.7 g/dl, creatinine was 0.79 mg/dl, LDH was 274 IU/L, TSH was 0.13 mIU/L, fT4 was 1.88 ng/dl, fT3 was 3.57 ng/dl and anti-TPO was 46 IU/ml.

The thyroid gland was diffusely enlarged (4-5 times its normal size), hypoechoic and heterogeneous, and a large number of hypoechoic heterogeneous nodular lesions, 55x40mm in size, were observed on ultrasonography. Diffusely enlarged thyroid gland spread to the trachea, extending to the right retrosternal part and causing esophageal compression, and multiple lymphadenopathy was found on the neck on computer tomography imaging (**image 1**). Because of laboratory and radiological findings suspicious of anaplastic thyroid cancer, total thyroidectomy was performed. The pathology of thyroidectomy specimen was reported as Diffuse Large B Cell Lymphoma (DLBCL). Moreover, immunohistochemically, CD3 and CD5 focal positive, CD20 diffuse positive, CD23 negative, EMA and PanCK negative and Ki67 proliferation index was 90%. There wasn't lymphoma involvement on the bone marrow aspiration. Cancer staging was determined as advanced stage (stage III-IV) according to the Ann-Arbor classification. The patient was considered as High Grade DLBCL and started to treat with R-CHOP. The patient died secondary to multiple-organ failure in 2nd cycle of the chemotherapy regimen.



Image 1. Coronal computed tomography (CT) image showing the possible connection of the mass to the thyroid gland

DISCUSSION

DLBCL is the most common histologic subtype of non-Hodgkin lymphoma (2). Patients with DLBCL typically present with a rapidly enlarging symptomatic mass, mostly nodal enlargement in the neck or abdomen (3). On the other hand, anaplastic thyroid cancer is the least common type of thyroid cancer. It is responsible for less than 2% of cases. It is a fast growing and rapidly spreading tumor, which is difficult to treat (4). We present an extremely rare case of DLBCL presenting with massive thyroid gland enlargement and resembling anaplastic thyroid cancer. In these patients, it is important to remember the causes of thyroid cancer in the differential diagnosis. Making the correct diagnosis in these aggressive cancers is very important for treatment.

Primary thyroid lymphoma affects predominantly elderly patients, the majority of them are women over 60 years of age. The condition is rare, accounting for less than 5% of all thyroid malignancies (5) and less than 2% of extranodal lymphomas (6). Thus they are seen infrequently by most pathologists and can be confused with a wide variety of entities, including benign disorders such as Hashimoto's thyroiditis at one end of the spectrum and undifferentiated carcinomas at the other (7).

DLBCL behaves in a more aggressive manner. In general, all thyroid lymphomas present with an enlarging neck mass. Indeed, a rapidly enlarging neck mass should raise suspicion for primary thyroid lymphomas and is reported in greater than 70% of cases, most commonly in those with DLBCL. Early diagnosis contributes to better management, which differs from that of other thyroid malignancies, and ensures increased rates of successful treatment without the need for radical (curative) surgical intervention. The cornerstone of current effective management is the combination of systemic chemotherapy (including biological agents) and loco-regional radiotherapy (8,9).

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