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SYNCHRONOUS OCCURENCE OF EXTRAMEDULLARY PLASMACYTOMA AND SQUAMOUS CELL CARCINOMA IN THE LARYNX

LARİNKSTE SKUAMÖZ HÜCRELİ KARSİNOM VE EKSTRAMEDÜLLER PLAZMASİTOM BİRLİKTELİĞİ

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ABSTRACT

Exramedullary plasmacytoma of the larynx is rare, especially when coexisted with squamous cell carcinoma. A 62-year-old male presented with history hoarseness and dyspnea. After laryngoscopic examination biopsy was performed epiglot and left ventricular band. The pathological examination revealed with the diagnosis of plasmacytoma and squamous cell carcinoma. The diagnosis of multiple myeloma was excluded as nonspesific results were obtained flow cytometry and peripheral blood smear. This case is the second repord of syncronous squamous cell carcinoma and extramedullary plasmacytoma of the larynx in the literature.

Key Words: *Extramedullary plasmacytoma; larynx; squamous cell carcinoma; synchronous.*

ÖZET

Larinksin ekstramedüller plazmasitomu az görülmekte olup, özellikle de skuamöz hücreli karsinom ile birlikteliği oldukça nadirdir. 62 yaşındaki ses kısıklığı ve nefes darlığı şikayetleri ile başvuran erkek hastaya laringoskopi yapılıp epiglot ve sol band ventrikülden biyopsi alındı, patolojik inceleme sonrası skuamöz hücreli karsinom ve plazmasitom tanısı aldı. Periferik yayma ve flow sitometri bulgularında özellik saptanmaması ile multipl myelom ekarte edilerek ekstramedüller plazmasitom olarak değerlendirildi. Bu vaka literatürdeki larinkste ekstramedüller plazmasitom ve skuamöz hücreli karsinom birlikteliği gösteren ikinci vakadır.

Anahtar Kelimeler: *Ekstramedüller plazmasitom; larinks; skuamöz hücreli karsinom; senkron.*

Introduction

Extramedullary plasmacytoma (EMP) is a rare neoplasm of plasma cells, described in soft tissue outside the bone marrow. Solitary plasmacytoma of bone, EMP and multiple myeloma (MM) constitute a continuum of a disease spectrum, which is called plasma cell neoplasm. EMP usually occurs at the age of 60s to 70s, mainly in men (1-2). The most frequently affected sites are the sinuses and submucosal lymphoid tissue of the nose . EMP has been reported rarely in the larynx, about a 10%. EMP of the larynx reprensts from 0.04% to 0.45% of the malignancy of the larynx , with an incidence less than 1% of all head and neck malignancies (3).

The symptoms EMP are sore throat, hoarseness and dysphonia which are uncharacteristic. The EMP of the larynx is pale yellow-gray to deep red, smooth or slightly raised.

EMP is a localized entity usually associated with a long surveillance. Nevertheless in 16% of the cases, the disease can progress to MM. Due to the high radiosensitivity of the EMP, the radiation alone is considered the treatment of choice (4).

Case Report

A 62 year old male presented with history hoarseness and dyspnea.He had history of smoking. Laryngoscopic examination revealed a red, smooth-surface swelling (5 mm) in the submucosal region of the epiglottis. Left ventricular band and left arytenoid of the larynx showed ulcerated mass. Enlarged lymph nodes were detected on the neck. Punch biopsy of the tumor was performed.The histopathological examination of epiglot tissue sample revealed fibrous stroma with intense plasmacytic infiltration,

covered with squamous epithelium (Figure 1). Immunohistochemically, kapa negative, lambda positive (Figure 2). CD38 positive (Figure 3). Sol band ventricul tissue sample revealed squamous cell carcinoma (SCC) (Figure 4). The results of flow cytometry and peripheral blood smear were nonspesific. The patient was treated with radiotherapy.

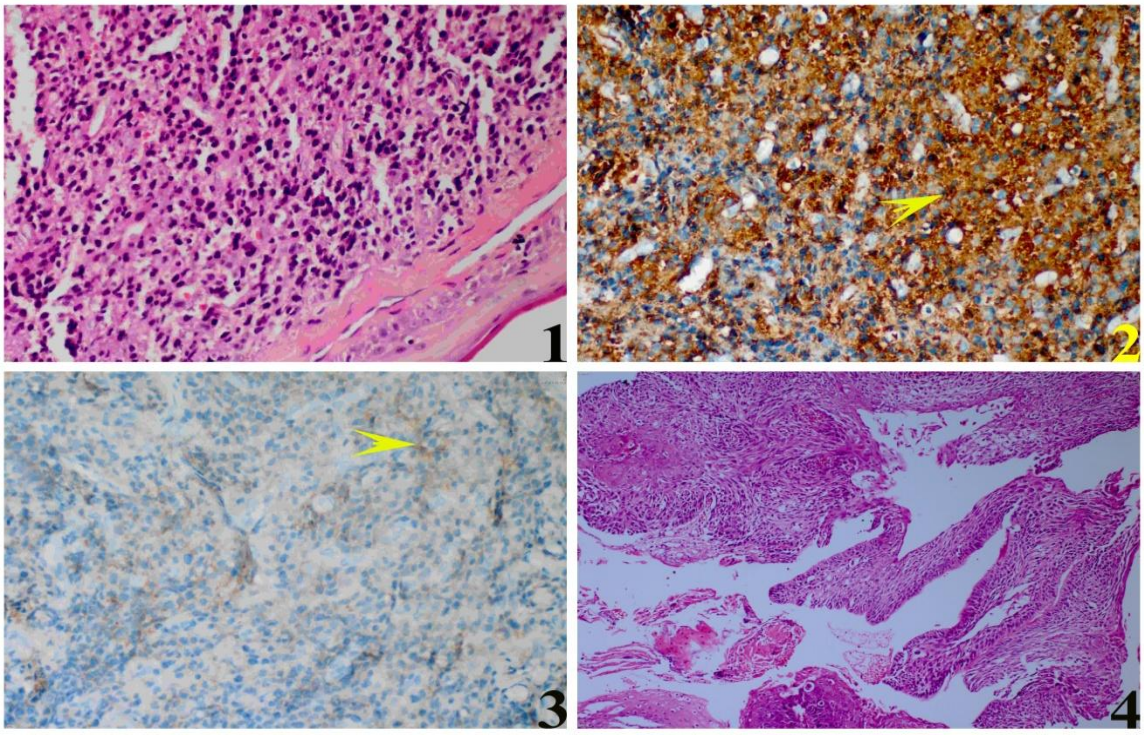

Figure 1: Multi-layered squamous epithelium located under dense plasma cell infiltration (HE X 40). **Figure 2:** Showing positivite staining of plasma cells with lambda (X40). **Figure 3:** Positive staining with CD38 in plasma cells (X40). **Figure 4:** İnvasive tumors composed of atypical squamous cells (HEX40).

Discussion

Synchronous malignencies in the head and neck are rare. Jones at al (5).reported that 15 (1.2%) of 1245 patients with laryngeal cancer had synchronous malignancies. Some types of lymphoma coexisting with SCC in the head and neck have been reported, such as chronic lymphocytic leukemia, small cell lymphocytic lymphoma and diffuse large B cell lymphoma (6). However, synchronous malignancies arose from different sites.Two different tumors affecting in the larynx synchronously is extremely rare. Only one case of synchronous EMP and SCC in the larynx had been reported (7). The most common sites of presentation of laryngeal plasmacytomas are in decreasing order of frequency: the epiglottis, vocal cords, ventricular bands, the arytenoids and subglottic space (8).The risk factors of EMP and SCC are smoking, excessive drinking, chemotherapy and radiotherapy (1).The common symptoms are hoarseness, dysphoni and sore throat.The diagnosis is based on histopathologic and immunohistochemical examinations. Histopathologically, EMP is composed of plasma cells with abnormal, large, round to oval nuclei surrounded by a characteristic paranuclear clearing. Immunohistochemically,plasma cells may express monoclonal immunoglobulin light chain of type lambda or kappa in cytoplasm; IgM and IgG appear more frequently than IgA, IgD, and IgE; immunostaining is usually positive with CD38 antibodie and negative with CD20 and CD3 antibodies. Radiation therapy to the EMP is considered the treatment of choice, with local control rates of 80-100% (9).

The prognosis for patients with SCC and EMP is relatively favorable. Lifetime fallow-up is necessary to early identify local failure, progression to MM, distant metastasis, and the development of multiple malignancies (7).

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Conflict of interest
The authors declare no conflict of interest.