Two Synchronous and Different Salivary Gland Tumors Located in the Parotid Gland and Parapharyngeal Region: A Case Report

Parotis Bezi ve Parafaringeal Bölgede Senkron İki Farklı Tükürük Bezi Tümörü: Olgu Sunumu

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ABSTRACT

The majority of salivary gland tumors presents as a single mass in one gland. The occurrence of synchronous distinct tumors in salivary glands is rare. We report a case of two distinct salivary gland tumors localized in the parotid gland and parapharyngeal area. The first mass was in the left parapharyngeal region and the second was partially embedded in the caudal region of the left parotid gland. Fine-needle aspiration was done for the parotid gland mass and cytological findings were consistent with Warthin's tumor. The parapharyngeal mass was excised and pleomorphic adenoma was diagnosed histopathologically. In this paper, cytological and histological findings of this rare patient are presented, and the literature is reviewed.

Key Words: Salivary gland tumor, Fine-needle aspiration biopsy, Warthin's tumor, Pleomorphic adenoma

ÖZ

Tükrük bezi tümörlerinin çoğu tek bir bezde tek bir kitle şeklinde bulunur. Eş zamanlı farklı tipte iki tükrük bezi tümörü nadirdir. Bu çalışmada parotis bezi ve parafarengeal alanda lokalize farklı iki tükrük bezi tümörü bulunan olgumuz sunulmaktadır. Birinci kitle sol parafaringeal bölgede, ikinci kitle ise sol parotis bezinin kuyruk kısmında lokalizeydi. Parotis bezindeki kitleye ince iğne aspirasyonu yapıldı ve sitolojik bulgular Warthin tümörü ile uyumlu bulundu. Parafaringeal kitle eksize edildi ve histopatolojik incelemede pleomorfik adenom tanısı konuldu. Yazımızda bu nadir olgunun sitolojik ve histolojik bulguları sunularak literatür gözden geçirilmektedir.

Anahtar Sözcükler: Tükürük bezi tümörü, İnce iğne aspirasyonu, Warthin tümörü, Pleomorfik adenom

INTRODUCTION

Salivary gland tumors are usually localized in one gland as a single mass. Multiple primary salivary gland tumors localized in more than one gland are rare. The prevalence of multiple primary salivary gland tumors was less than 2% in large series (1,2). Warthin's tumor is the most common type among multiple primary salivary gland tumors, and constitutes 85% of bilateral parotid tumors (3). The occurrence of multiple salivary gland tumors with different histological characteristics is extremely rare. The most common coexistence is pleomorphic adenoma and Warthin's tumor (1,4). We present a patient with two different tumors localized in the parotid gland and parapharyngeal area. Fine needle aspiration allowed appropriate treatment before operation.

CASE REPORT

A 58-year-old male patient with a mass in the left side of the neck for 3 months was admitted to hospital. Physical examination revealed two masses; a mobile, painless, left jugular mass (lymphadenopathy?) and a parapharyngeal mass behind the left tonsilla palatina. Computed tomography examination of the cervical region and pharynx demonstrated two soft tissue masses. The first mass was in the left parapharyngeal region and about 3.5x3x3 cm in dimensions. This mass was well-circumscribed and showed heterogeneous contrast uptake. The second one was 4.5x2.5x2 cm, sharply delineated and homogeneous. It was partly embedded in the caudal region of the left parotid gland. The initial clinical diagnosis was a probable metastatic malignant tumor. Fine needle aspiration was done for the

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parotid gland mass. Cytological findings were consistent with Warthin's tumor (Figure 1). The parapharyngeal mass was excised and the histopathological diagnosis was pleomorphic adenoma (Figure 2). The parotid gland mass was excised by partial parotidectomy 3 months later, and histopathological examination revealed Warthin's tumor (Figure 3). Clinical, radiological and operative findings showed that these two masses were anatomically distinct lesions. The patient did not experience any problems during the post-operative period, and no recurrence was observed by the tenth month.

DISCUSSION

Tumors of the salivary gland comprise 3–6% of all head and neck neoplasms in adults (5). Salivary gland tumors are usually localized in one gland as a single mass, and multiple primary salivary gland tumors localized in more than one gland are rare. Turnbull and Frazell (1) reported that 27 of 2,072 (1.3 %) patients had tumors localized in more than one gland. Janecka et al. (2) reviewed approximately 2,000 parotid tumors and found only seven cases (0.4%) with separate, synchronous neoplasms of different histological types in the parotid gland. Warthin's tumor is the most common pathological type and can be clinically multicentric (12-20%) or bilateral (5-14%) (6).

The occurrence of multiple salivary gland tumors with different histological characteristics is extremely rare and makes up comprise less than 0.3% of salivary gland neoplasms (4,7,8). The most common co-existence is pleomorphic adenoma and Warthin's tumor (4,8). Lefor et al. (8) reviewed the literature and found 48 cases of salivary gland tumors having at least two different histological types. These tumors were Warthin's tumor with pleomorphic adenoma (n=20), Warthin's tumor with other tumors (n=17), pleomorphic adenoma with other tumors (n=9), and a combination of salivary gland tumors without pleomorphic adenoma or Warthin's tumor (n=2). None of these tumors were in the parapharyngeal space.

Primary tumors of the parapharyngeal space comprise less than 0.5% of all head and neck neoplasms (9). Hughes et al. (10) reported 172 patients with primary parapharyngeal space neoplasms and 137 (80%) of these were benign. Pleomorphic adenoma was the most common neoplasm (40%), followed by paraganglioma (20%), neurogenic tumors (14%), malignant salivary gland tumors (13%), miscellaneous malignant tumors (7%), and miscellaneous benign tumors (6%). Shahab et al. (9) reported 114 primary pharyngeal space tumors of which 84% were benign.

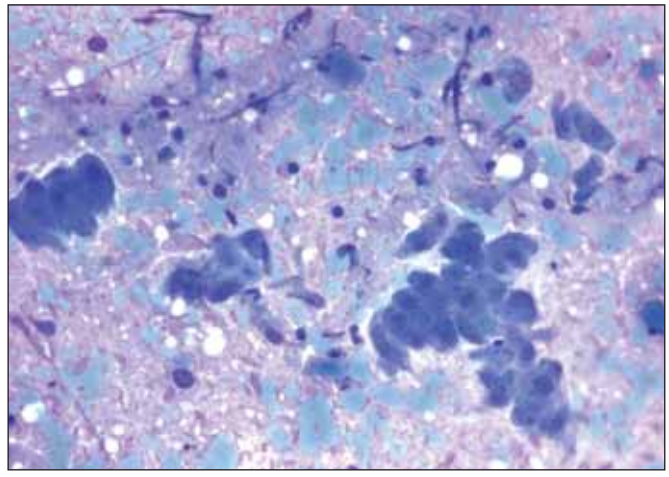

Figure 1: Cytological smear of parotid mass showing prominent oncocytic epithelial cell with abundant cytoplasm (Diff-Quik, x400).

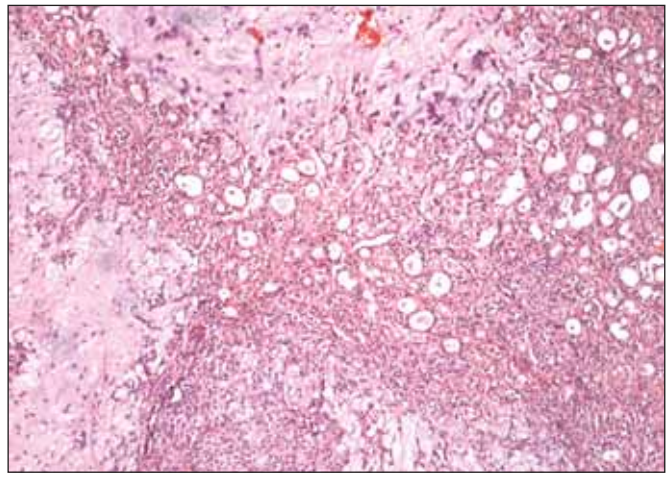

Figure 2: Epithelial component with ductal structures and mesenchymal myxoid component in the parapharyngeal mass (H&E, x100).

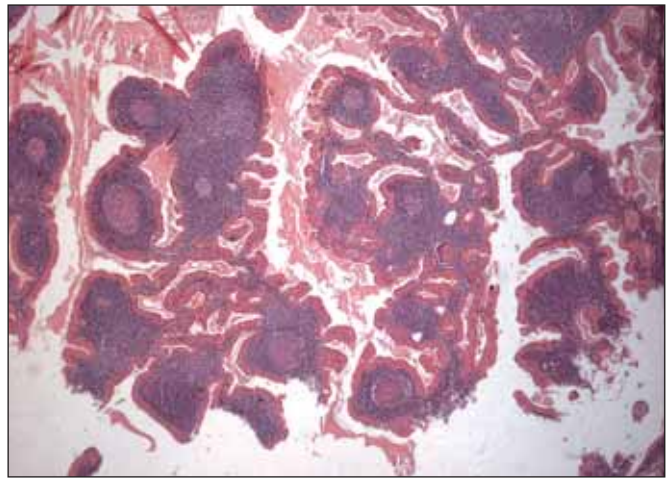

Figure 3: Cleft-like spaces separate the lobules of tumor based on a lymphoid stroma bearing pale germinal centers in the parotid mass (H&E, x25).

Pleomorphic adenoma was the most common neoplasm (30%) in their series.

The differential diagnosis of a neck mass should include infections, lymphoma, and benign and malignant tumors. The clinical presentation of our patient suggested a parapharyngeal malignant tumor and metastatic lymph node. Because of the wide range and heterogeneous nature of benign and malignant tumors arising from salivary glands, similarities, and overlapping cytological features, conclusive cytological examination is difficult in these lesions. The cytological diagnosis of Warthin's tumor localized in the parotid gland helped the surgeon to avoid a more invasive intervention and the parapharyngeal mass was removed with simple excision. Fine needle aspiration of the salivary gland lesions, which is a simple and cheap procedure, may help the surgeon in critical decision making concerning treatment.

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