

Tümörden Tümöre Metastaz: Warthin Tümöründe Kutanöz Yassı Hücreli Karsinom**Tumor-To-Tumor Metastasis: Warthin's Tumor as a Recipient of Cutaneous Squamous Cell Carcinoma**Çetin Boran¹, Asuman Kilitci², Hilal Ahsen³¹Abant İzzet Baysal Üniversitesi Tıp Fakültesi, Patoloji Anabilim Dalı, Bolu²Ahi Evran Üniversitesi Eğitim ve Araştırma Hastanesi, Patoloji Bölümü, Kırşehir³Atatürk Eğitim ve Araştırma Hastanesi, Patoloji Bölümü, Ankara**Özet**

Warthin tümörü (WT), hem epitel ve lenfoid bileşenden oluşan iyi huylu bir tükürük bezi tümörüdür. WT'ne skuamöz hücreli karsinom (SHK) metastazı son derece nadirdir ve ayırıcı tanısında malign transformasyon önemlidir. Biz, 71- yaşındaki erkek hastada parotis bezinin WT'ne metastaz yapmış SHK olgusunu sunuyoruz.

Anahtar Kelimeler: Warthin tümörü, metastaz, skuamöz hücreli karsinom

Abstract

Warthin's tumor (WT) is a benign salivary gland neoplasm consisting of both epithelial and lymphoid components. Metastasis of an squamous cell carcinoma (SCC) to WT is extremely rare and the differential diagnosis of malignant transformation is important. We present a case with SCC metastatic to the WT of parotid gland in a 71- year-old male patient.

Keywords: Warthin's tumor, metastasis, squamous cell carcinoma

INTRODUCTION

Papillary cystadenoma lymphomatosum was described by Warthin in 1929 (1). It is a benign salivary gland neoplasm arising especially in the parotid glands of males, with a peak incidence in the sixth and seventh decades (2). The tumor is usually asymptomatic or present as a slow-growing painless mass (3). It's composed of glandular and cystic structures, occasionally with papillary cystic arrangement, and lined by typical eosinophilic epithelium. The stroma of the tumor includes a variable amount of lymphoid tissue with follicles (4). Malignant transformation of the lymphoid component and epithelial malignancy (epidermoid carcinoma, adenocarcinoma, and undifferentiated carcinoma) in Warthin's tumor (WT) is relatively common. This report demonstrates squamous cell carcinoma (SCC) metastasis to the WT in a patient without any malignancy arising from the Warthin's stroma. To the best our knowledge, such a phenomenon has not been presented so far.

CASE REPORT

Excisional biopsy was performed in a 71-year-old male patient because of multiple wounds on his head. Left temporal area biopsy was diagnosed as basal cell carcinoma (BCC)+SCC, right ear and nasal dorsum biopsy were diagnosed as SCC. In terms of investigating metastasis and local spread, the left parotid nodule larger than 1 cm was detected on CT scan. A fine needle aspiration (FNA) of parotid lesion was performed and a diagnosis of WT was made. The patient underwent superficial parotidectomy as he was not suspected of having SCC in WT preoperatively.

On microscopy, islands of malignant squamous epithelial cells were found to invade the both lymphoid and epithelial components of Warthin's stroma (numerous dilated cysts filled with secretion and lined by double layered cuboidal oxyphilic epithelial cells arranged in a papillary growth pattern, the papillae projecting into cystic spaces). The final histological diagnosis was WT with metastatic SCC in it and

also metastasis in parotid lymph node.

DISCUSSION

Warthin's tumor include about 5-10% of parotid tumors (2). They are more common in men, may be bilateral in up to 10% of cases, and occasionally are multicentric in origin (4).

Maiorano et al found 13 cases of WT (16.6%) were associated with other malignancies. They put forward multiple (synchronous or metachronous) WTs may occur more frequently than previously reported. They added that the high rate of multiple WTs detected in their study may result from extensive and accurate sampling of these neoplasms for histopathological evaluation (5).

Reports of malignancy occurring within a parotid adenolymphoma coexisting head and neck malignancy are rare. Moreover, tumor to tumor metastasis is an exceedingly rare event with only about 100 cases in the English written literature (6). Rabson et al. debated the immunologic aspects of the extreme rarity of the phenomenon of cancer metastatic to cancer. They suggested that once a neoplasm has 'staked out its claim in an organ,' it may produce a substance locally antagonistic to another neoplasm, protecting it from invasion by an opponent. When there is an overwhelming disturbance of the whole organism, this protection may fail, giving rise to the cancerous growth by another tumor within the recipient neoplasm (7). Some clinical and biological characteristics of recipient tumors, such as slow growth rate, hypervascularity, and high collagen and lipid content, may play significant roles in metastatic seeding (8). Since the evolution of WT is typically very slow, this hypothesis can be favored in our case.

SCC and BCC of cutaneous origin are very common neoplasms in head and neck area. Locally aggressive behavior is much more common than metastatic spread. However,

three examples of BCC metastatic to salivary glands (or intraglandular lymph nodes) were determined by Stanley et al. Though most morphologic variants of these tumors are defined by architectural and cellular alterations, may be superimposed on the Warthin's stroma (9).

A malignant change in a WT is suggested clinically by a recent history of a rapid enlargement of a longstanding mass (10). This wasn't noted in the present case and the tumor was detected incidentally.

The incidence of malignant tumors developing from pre-existing WT has been estimated to be 0.3% of all WT cases (11). Damjanov et al. postulated that squamous carcinomas arose from a focus of squamous metaplasia (10). The presence of transitional zones right from the benign oncocytic component to the frank malignant epithelium is important to be separated from the metastasis of primary carcinoma in another site (12). We did not see any transitional zone showing squamous metaplasia of the lining epithelium.

Complete preoperative work-up of patients harbouring parotid tumors coherent with or suspicious for WT is necessary. The work-up should contain CT scans and/or magnetic resonance imaging of both parotid glands, to exclude the occurrence of multiple tumors, which may be clinically undetectable. Further, FNA biopsy may be an accurate method for excluding malignant neoplasms and for better planning following surgical procedures (5).

According to Heller et al, the accepted management is enucleation of the tumor unless it is too close to the facial nerve to be safely enucleated (13). Surgical procedures usually consist of (bilateral) superficial parotidectomy and should be followed by long term follow up of the patients, in view of possible metachronous WTs, even after prolonged time

periods (5). In the present case the patient underwent superficial parotidectomy as he was not suspected of having SCC in WT preoperatively.

Our case emphasizes the pitfalls in the clinical and the histopathologic identification of malignant changes in WTs. The pathologists should have adequate awareness to make a histological diagnosis of the metastatic spread or malignant transformation of WT. It is that's why significant for the clinician to make proper decisions.

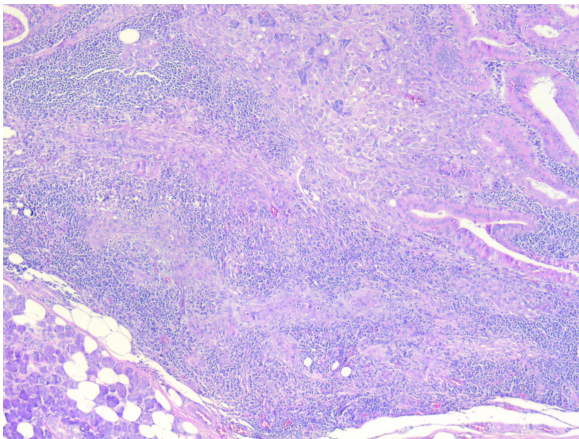


Figure 1. Warthin's tumor with invasion of the lymphoid stroma by metastatic squamous cells in parotid gland (X50, H&E).

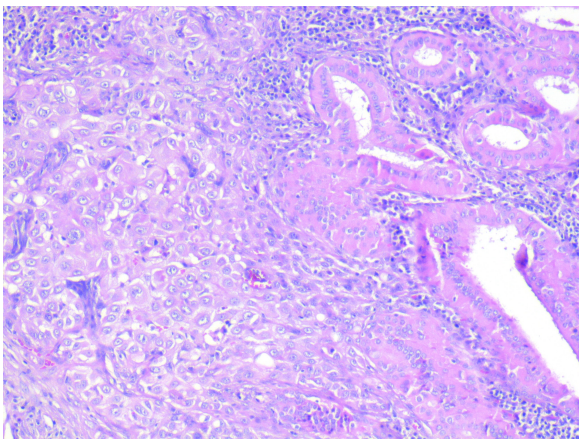


Figure 2. Lymphoid stroma almost replaced by sheets of squamous carcinoma cells (X100, H&E).

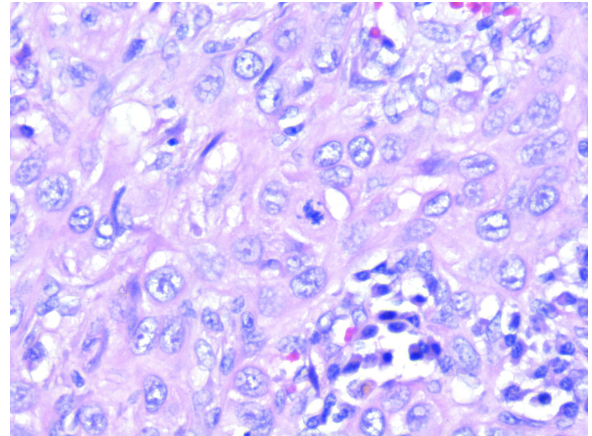


Figure 3. Pleomorphism, high N/C ratio, prominent nucleoli and mitosis in high power magnification (X400, H&E).

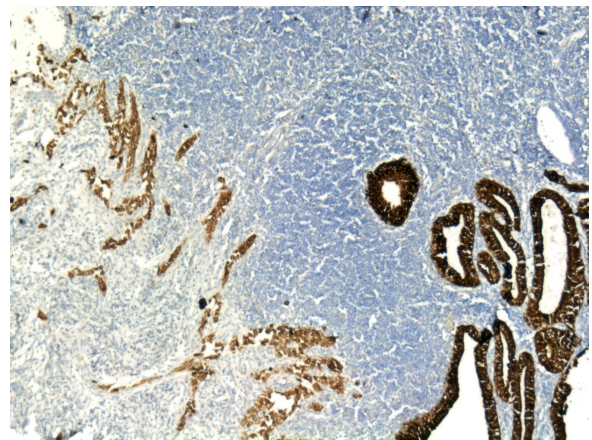


Figure 4. Cytokeratin is positive in malignant squamous cells and Warthin's tumor cells (X50).

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