

## Ductal Carcinoma of the Parotid Gland Coexisting with Pleomorphic Adenoma

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**Abstract:** Benign tumors of the parotid gland such as pleomorphic adenoma present as a painless mass and pose no difficulty in diagnosis. It is very rare to find a benign mass coexisting with a malignant entity in the parotid gland. We present a case of pleomorphic adenoma coexisting with ductal carcinoma.

**Key Words:** Pleomorphic adenoma, ductal carcinoma, parotid gland

### Parotis Bezi Pleomorfik Adenomu ile Birlikte Duktal Karsinom

**Özet:** Genellikle pleomorfik adenom ve diğer benign tükürük bezi tümörlerinin tanısı preoperatif dönemde konur. Nadir olarak tanı konulamaz. Bu vaka sunumunda parotis bezinde pleomorfik adenomla birlikte duktal karsinomun bulunduğu nadir bir olgu bildirilmektedir.

**Anahtar Sözcükler:** Pleomorfik adenom, duktal karsinom, parotis bezi

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### Introduction

Mostly, pleomorphic adenoma and other benign salivary gland tumors can easily be diagnosed preoperatively (1). Rarely, the diagnosis can be challenging. In this case report, we describe an unusual tumor of parotid gland where a pleomorphic adenoma coexisted with a ductal carcinoma.

### Case Report

A 47-year-old man presented with masses in the left parotid gland that had grown in size over the last 2 years. His history revealed that the masses had been present for the last 15 years. He reported of no pain. The physical examination showed nodular masses in the left parotid gland (Figure 1). The patient had no facial paralysis. CT scan showed the mass extending to the deep lobe of the parotid gland. The fine needle aspiration biopsy was consistent with pleomorphic adenoma. The patient underwent total parotidectomy with preservation of facial nerve branches. Postoperatively the patient had mild paresis of marginal branch of the facial nerve which subsided in the following weeks. The pathology report revealed pleomorphic adenoma coexistent with ductal carcinoma of the parotid gland (Figure 2).

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### Discussion

It is well known that the parotid gland is the most frequent site of tumors arising from the salivary gland (1). Approximately 80% of parotid tumors are benign and of these 80% are pleomorphic adenoma (2). Malignant degeneration is generally associated with a prolonged history of untreated or recurrent pleomorphic adenoma (3). However, the occurrence of a secondary carcinoma in a preexisting pleomorphic adenoma is uncommon, with an incidence between 1.4% and 6.3% (4). The risk of malignancy



Figure 1. Preoperative picture of the patient. Note multinodular appearance in the parotid gland.

increases with the duration of a mixed tumor (5). Some reports show that cancer eventually develop in up to 25% of untreated mixed tumors (6).

## References

1. Takashi H, Yamamoto Y, Tsukasa I, Hiroaki N, Motohiro N, Takeshi H. Giant Pleomorphic Adenoma of the Parotid Gland with Malignant Transformation. *Ann Plast Surg* 2001; 55(5): 524-527.
2. Kargı E, Tuncel A, Tuncel Ü, Deren O, Seçkin S, Erdoğan B. Giant and Pleomorphic Adenoma of the Parotid Gland; *Turk Plast Surg* 2004; 12: 139-142.
3. Shaheen OH. Benign salivary tumors . In: Scott Brown's Otolaryngology. 5th ed. Vol.5. London Butterworth Publication 356-359,1987.
4. Duck SW, McConnell FM. Malignant degeneration of pleomorphic adenoma: clinical implications. *Am J Otolaryngol* 1993; 14: 175-178.
5. Olsen KD, Lewis JE. Carcinoma ex pleomorphic adenoma: a clinicopathologic review. *Head & Neck* 2001; 23: 705-12.
6. Thackray AC, Lucas RB. Tumors of the major salivary glands. *Atlas of tumor pathology*. Washington DC: Armed Forces Institute of Pathology 107-117, 1983.

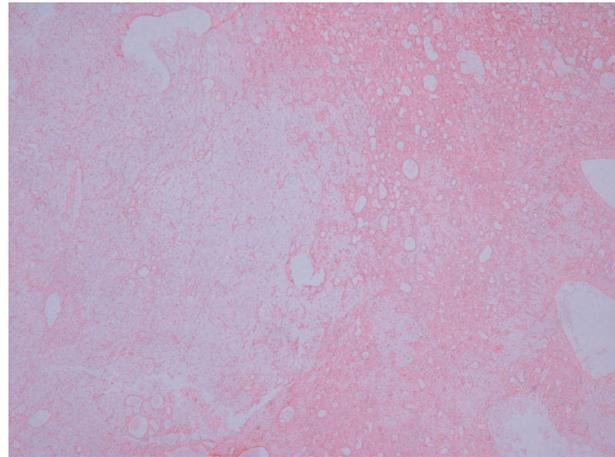


Figure 2. Pathology depicting pleomorphic adenoma together with ductal carcinoma

In this case report, the patient had to undergo total parotidectomy due to invasion of the tumor into the deep lobe. We believe that in any case of pleomorphic adenoma particularly those of long history, the diagnosis of malignancy must be ruled out. Despite the failure of fine needle aspiration to show malignancy, the decision for the extent of surgery must be based on the preoperative work up such as computerized tomography scan. We must be cognizant of the fact that an innocuous looking benign tumor of parotid gland may turn out to be a malignant tumor.