

Case Report

Oncocytoma of Palatal Minor Salivary Gland

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Abstract

Oncocytoma is a rare benign salivary gland tumor, which mostly occurs in the parotid gland. In this article, we describe an early onset of oncocytoma of minor salivary gland in a 36-year, white male. On clinical examination, we encounter with a painless, granular, sessile mass. After Excisional biopsy, the histopathological features revealed sheets of cells with abundant granular eosinophilic cytoplasm, and large, round nuclei that are known as "Oncocyte".

Keywords: Benign tumor, minor salivary gland, oncocytoma

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Introduction

Oncocytoma is a rare benign salivary gland tumor.¹ Oncocytomas that composed of oncocytes are most commonly found in persons older than 50 years of age. These tumors occur almost exclusively in the parotid gland and stand for 1% of all parotid gland tumors. Well-documented reports of intraoral oncocytoma arising from minor salivary glands are very rare.² This article explains a case of oncocytoma of soft palate in a middle age male.

Case Report

A 36-year old white male was referred to the Department of Oral and Maxillofacial Medicine, Babol Dental School, for evaluation of a painless mass with more than one-year duration on the soft palate. No significant medical history and no other symptoms were reported. Family history was also unremarkable.

Intraoral examination showed a well circumscribed, granular, rounded sessile mass on the right side of the soft palate. It was one centimeter in diameter and ulcerated in the center (Figure 1A). On palpation, the lesion was soft and non-tender. There was no paresthesia or regional lymphadenopathy. According to clinical presentation, and based on the location of the lesion, possible differential diagnoses include: benign minor salivary gland tumors such as pleomorphic adenoma, malignant minor salivary gland tumors such as mucoepidermoid carcinoma, and other soft tissue lesions.

For a definite diagnosis, a total excisional biopsy with a safe margin of about 2 millimeter and light microscopic examination were performed. On gross examination, the tumor was measured 1.3 × 0.8 × 0.2 cm. The microscopic sections revealed sheets of

polyhedral cells with abundant granular eosinophilic cytoplasm as well as large, and round nuclei. Cells were characterized with prominent nucleolus and arranged in a glandular pattern (Figures 2A and 2B).

The patient was free of any clinically evident of recurrence four months after the surgery (Figure 1B).

Discussion

Oncocytoma is a benign tumor, which consists of less than 1% of the salivary gland neoplasia.³ It is composed of epithelial cells with large amount of granular cytoplasm and small nuclei in the center of the cell. Such cells are known as "Oncocyte". The granular cytoplasm, as seen with electron microscopy, is composed of numerous swollen normal and abnormal mitochondria. This tumor was well-circumscribed and surrounded by a fibrous capsule.¹ Salivary gland oncocyte that appears after salivary gland maturity has a high level of oxidative activity and there is lack of specialized features of normal cells.⁴

Minor salivary gland tumors are uncommon. A literature study by Venkata, et al.⁵ revealed that the relative frequency of minor salivary gland tumor from institutional studies ranges from 0.03% to 1.9%. They also encountered minor salivary gland tumors in 1.52% of the oral biopsies themselves.⁵

Fabia Ramoa Pires in a study of 549 cases of minor salivary gland tumors that were gathered in 14 years, reported that pleomorphic adenoma was the most common tumor and oncocytoma was encountered just in 4 cases.⁶ Minor salivary gland tumors are relatively uncommon lesions in the daily practice. Oncocytoma occurs almost exclusively in the parotid, but in this case, it arose from minor salivary glands of the soft palate.

Another reason to report our case is that oncocytomas are rare among people who are under 50 and their prevalence rises with increasing age.¹ They are more common in elderly with a peak of incidence in the eighth decade of their life,⁷ but the present case was a 36-year old who was very younger than other reported cases.

While the present case has involved a male patient, others have indicated that this tumor is equally distributed in both men and women.⁷

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Figure 1. A) Sessile exophytic mass of the palate; B) Four months after surgical excision.

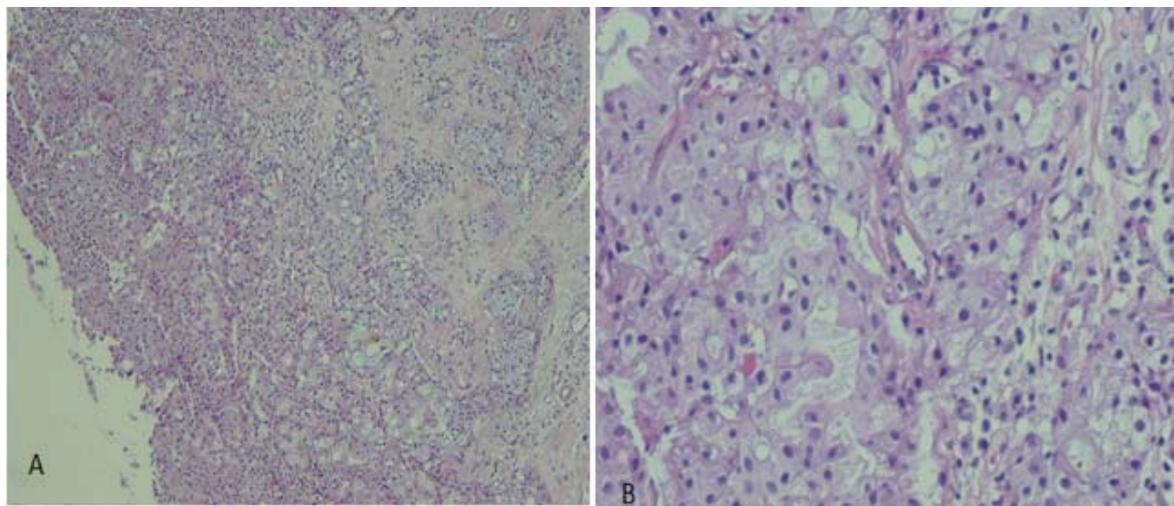


Figure 2. Histological features from intraoral soft-tissue Oncocytoma; A) H&E staining $\times 10$; B) H&E staining $\times 100$.

Treatment for oncocytoma consists of surgical excision and the recurrence rate of this lesion is very low. In the present case, surgical removal was done together with the removal of a small margin of uninvolved soft tissue (2 to 3 millimeter safe margin).

Clinical Importance:

According to this case, oncocytoma should be considered in soft palate nodules in middle-aged patients.

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