Case Report

# Pleomorphic adenoma of the upper lip

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## ABSTRACT

This case report describes a rare and unusual lesion found in a 33-year-old male, which was diagnosed as pleomorphic adenoma of the minor salivary glands in the upper lip. The tumor was a circumscribed, large firm mass, about 3 cm in diameter, almost obstructing the nares and characterized by slow growth. Complete excision was performed and the histopathologic analysis showed pleomorphic adenoma. The tumor did not recur. A brief review of the relevant literature is also presented.

**Key words:** Minor salivary gland tumors, pleomorphic adenoma, upper lip

## Introduction

The most common salivary gland tumor is pleomorphic adenoma (PA), which accounts for 60–65% of such diseases.[1] It mainly affects women in their fourth to sixth decade of life, and has a natural history of asymptomatic slow growth over a long period. It usually involves major salivary glands, most commonly involving the tail of parotid. It also involves minor salivary glands. The lips are commonly affected sites, second only to the palate, and account for about 20–40% of all intraoral PAs.[2,3] The most common site of a PA of the minor salivary glands is the palate, followed by lip, buccal mucosa, floor of mouth, tongue, tonsil, pharynx, retromolar area and nasal cavity.[4-7]

The etiology of PA is unknown. It is epithelial in origin, and clonal chromosome abnormalities with aberrations involving 8q12 and 12q15 have been described.[8] This paper describes the diagnosis and management of an asymptomatic, slowly growing PA in the upper lip of a male in the fourth decade of life.[8]

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## Case Report

A 33-year-old male presented in Maxillofacial Surgery OPD of Career Post Graduate Institute of Dental Sciences and Hospital, with a complaint of painless lump in the upper lip. The overlying skin and labial mucosa was free. The mass slowly increased in size during the past 1 year and 6–7 months approximately. At the time of examination, nasal vestibule was almost obstructed. On examination, the mass was well circumscribed, slightly mobile, sessile, rubbery in consistency and 3 cm in diameter. The overlying mucosa was smooth with pinkish purple color, showing evidence of superficial vascularity. Skin over the tumor was not fixed. There was no pain or bleeding on palpation. Head and neck abnormalities were not noted on clinical examination. The medical history was unremarkable, and no other abnormalities were found on clinical examination. Computed tomography (CT) was done to see the extent of lesion tumor as shown in Figure 1. Two small radiopaque shadows were evident in the lesion [Figure 2]. A differential diagnosis of foreign body granuloma was made. Mixed salivary gland tumor was also considered. Due to well-circumscribed nature of the lesion, an excisional biopsy was planned.

The tumor was completely removed with lip splitting incision as shown in Figure 3. During the surgical procedure, the lesion was excised without difficulty with clinically normal margin because the mass was fully encapsulated [Figure 4]. Subsequent follow-up after 1 year showed no signs of recurrence. Histopathologic

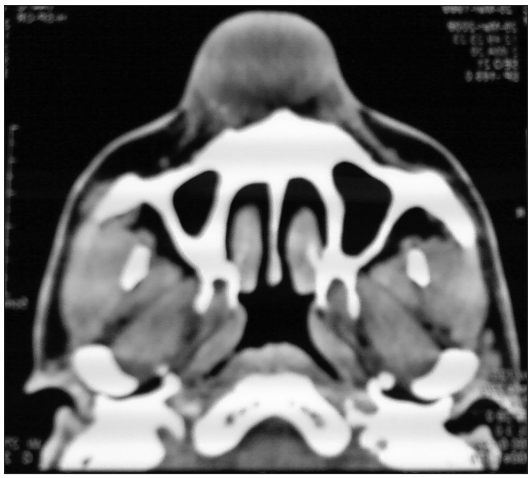

**Figure 1:** Axial CT scan showing pathology

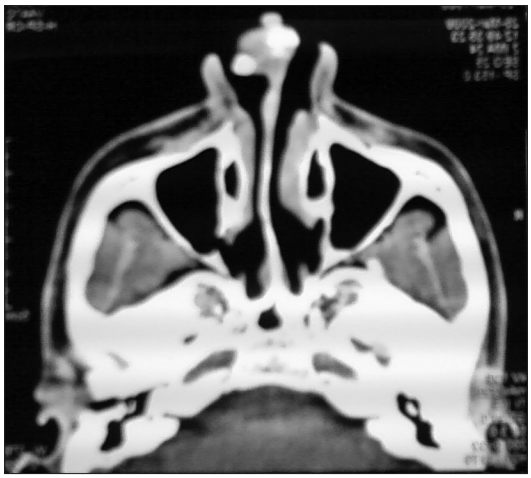

**Figure 2:** Axial CT scan showing radiopacity in pathology

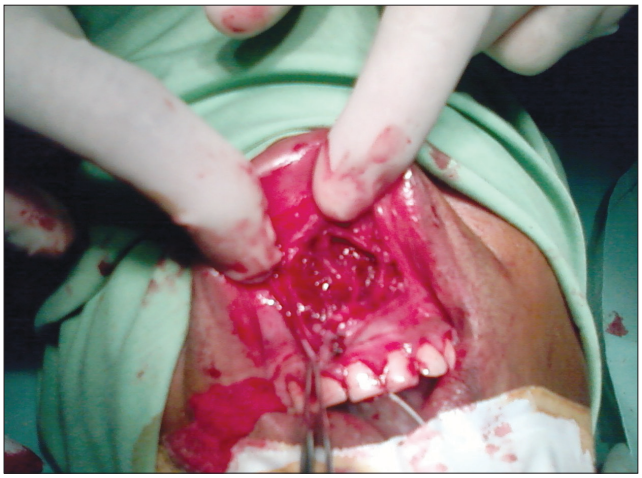

**Figure 3:** Lip split incision

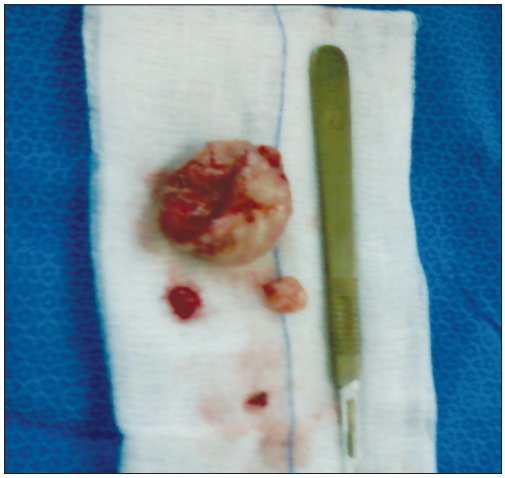

**Figure 4:** Pathology removed

analysis of the surgical specimen revealed PA and there was no evidence of malignancy.

## Discussion

Differential diagnoses of intraoral, solid, asymptomatic nodules include minor salivary gland tumors, and benign and malignant mesenchymal lesions such as neurofibroma and rhabdomyosarcoma. For lesions affecting the buccal mucosa, lip and tongue, lipoma, neurofibroma and other benign mesenchymal tumors should be considered. The encapsulation and mobility of the nodule are signs of probable benignity, although a biopsy must always be performed.[9]

PAs are usually painless, slow-growing tumors; however, some cases exhibiting rapid growth have been reported, especially in the palate. PA appears to be encapsulated, but this capsule is often infiltrated by lateral extension of the tumor. Even though PA is benign, it has a high rate of implantability. Any rupture of the capsule or incomplete excision will leave residual tumor cells behind, resulting in recurrence.[10]

A lesion referred to as Salivary Gland Anlage Tumor (SGAT) histologically resembles a PA.[11,12] The microscopic and ultrastructural pattern of this benign tumor shows epithelial and mesenchymal components, with tubular and cord-like structures composed of cells immunophenotypically compatible with myoepithelium, which express a broad spectrum of keratins and epithelial membrane antigens, while the stromal component expresses vimentin and smooth muscle actin.[13,14]

Kroll and Hick[15] reviewed 4042 cases of PAs of the salivary glands. Only 445 originated in the minor salivary glands, and only 16.9% were located in the upper lip and 2.9% in the lower lip. Bernier found that the peak incidence of PA of the lips was in the third and fourth decades, with an average age of 33.2 years.[16] Owens and Calcaterra found 90% of the upper lip tumors to be benign.[17] Eveson and Cawson found 75% of the upper lip tumors as benign.[3]

Minor salivary gland tumor presents as soft or firm masses, with most of them having a nodular, exophytic component. Ulceration of the nodular mass may occur, but the presence of ulcer provides no clue to the invasiveness of the tumor. Those that are soft on palpation usually have large cystic cavities and an abundance of mucin.

The case reported here did not show any recurrence, 12 months after surgery.

We plan to follow the case for the next 4 years at least taking into consideration the characteristics of salivary gland tumor which may reoccur years after surgery.

The aim of presenting this case report is to alert the clinicians regarding the diagnosis of unusual cases of orofacial swellings. As these lesions are asymptomatic, the patient may not be aware of their existence or are discovered accidentally by a dentist during examination.

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