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Pleomorphic Adenoma: A Case Report and Review of Literature.

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ABSTRACT

Pleomorphic adenoma is also called benign mixed tumor. It is the most common salivary gland tumor. About 90% of these tumors occur in the parotid gland and 10% of them occur in the minor salivary glands. Of the minor salivary glands, the most common site is the palate followed by lips and cheeks. In this paper, we are reporting a case of pleomorphic adenoma of the minor salivary glands of the palate in a 55-year old female patient.

Keywords: Salivary gland, Pleomorphic adenoma, parotidectomy.

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INTRODUCTION

Pleomorphic adenoma is a benign salivary gland tumor. It represents about 3-10% of the neoplasms of the head and neck region [1]. They are the most common tumors (50%) of the major salivary glands especially the parotid [2]. The palate is considered as the most common intra-oral site (42.8-68.8%), followed by the upper lip (10.1%) and the cheeks (5.5%) [3]. Other rare sites include the throat (2.5%), the retromolar region (0.7%), the floor of the mouth and the alveolar mucosa [4]. Pleomorphic adenoma presents as a painless, mobile, slowly growing, firm, sometimes lobulated swelling.

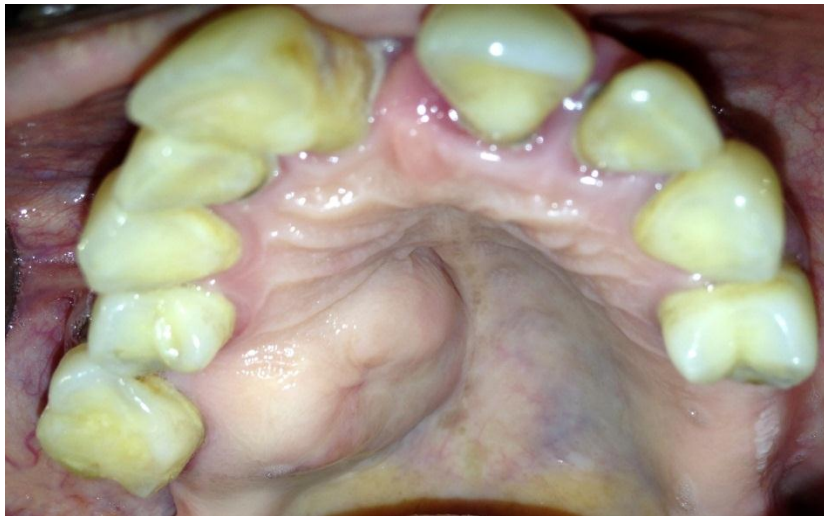
This is a case report of a 55-year old female patient having pleomorphic adenoma of the palate.

Case Report

A 55-year-old female patient reported to our dental OP with a chief complaint of a swelling on palate since 10 years. Patient was apparently normal 10 years back. Following which she developed a swelling on right side of palate. The swelling was initially small in size and gradually progressed to attain the present size. No history of associated pain and fever.

On intraoral examination, a single well defined swelling was evident on right side of hard palate extending anteriorly from distal aspect of 15 to posteriorly distal aspect of 16, laterally from gingival margin of 15, 16 to medially upto the midline of hard palate. Mucosa over the swelling appeared normal. On palpation, the swelling was lobulated and non-tender. (Figure 1)

Figure 1: A single well defined swelling was evident on right side of hard palate



Grade I mobility of 16 was evident. Buccal displacement of 16 was present.

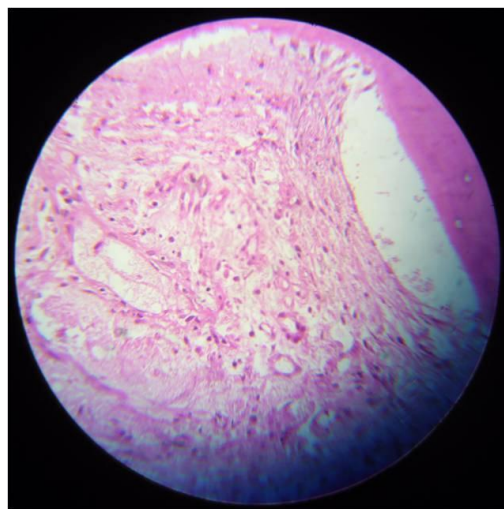
A provisional diagnosis of minor salivary gland tumor was made. Differential diagnosis of fibroma, oncocytoma, schwannoma and lipoma were considered.

Computed tomography (CT) scan revealed small well defined soft tissue density lesion 45 to 58 HU measuring 1.9 X 1.3 cm seen in sub mucosal of inferior aspect of hard palate on right side causing mild indentation on the overlying bone. These features were suggestive of a soft tissue mass on palate. (Figure 2) An excisional biopsy was performed and specimen was sent for histopathological investigation. The hematoxylin-eosin stained sections showed islands and sheets of epithelial cells. The tumor shows plasmacytoid differentiation in certain areas and many cells are angulated and spindle shaped. In focal areas the cells exhibits polygonal shape. The stroma is predominantly hyalinized and also shows myxoid and fibrous tissue. (Figure 3)

Figure 2: Computed tomography (CT) scan revealed small well defined soft tissue density lesion



Figure 3: Histopathological section showed islands and sheets of epithelial cells.



Considering the positive findings of history and investigations a final diagnosis of pleomorphic adenoma of palate was made.

DISCUSSION

Pleomorphic adenoma is a salivary gland tumor occurring in major and minor salivary glands. The incidence of parotid tumor is about 2.4 in 100000 per year. Involvement on the right is more common than left side and more common in female than male (2:1). It commonly occurs between fifty to sixty years [5,6].

The term "Pleomorphic" refers to both histogenesis and histology of the tumor [7].

Pleomorphic adenoma consists of cells with epithelial and mesenchymal differentiation. Now, it has been largely accepted that both epithelial and mesenchymal (myxoid, hyaline, chondroid and osseous) elements often arise from the clone of same cell, which may be a ductal reserve cell or a myoepithelial cell.

The variants of pleomorphic adenoma are pleomorphic adenoma with a lipomatous change, myxoliomatous pleomorphic adenoma, pleomorphic adenoma with a squamous differentiation and benign metastasizing mixed tumor [8].

The treatment of choice is surgical excision, which can be either enucleation, superficial or total parotidectomy. The recurrence rate declined from 20% to 45% in the period of enucleation to 2% to 5% with the introduction of lateral parotidectomy [9]. The incidence of malignant transformation ranges from 1.9 - 23.3%. [6]. Thus an early diagnosis and prompt treatment is essential to avoid complications.

CONCLUSION

This case represents a classic example of a minor salivary gland tumor of palate. Successful treatment begins with an appropriate histopathology confirmed diagnosis. Computed tomography aids in evaluating the extent and in surgical planning. A long-term follow-up is required because of the risk of recurrence even several years after the initial excision.

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