



RESEARCH ARTICLE

A SOLITARY SUBMUCOSAL MASS IN THE MAXILLARY BUCCAL VESTIBULE

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ABSTRACT

We are reporting a case of Pleomorphic adenoma in a 30-year-old, otherwise healthy female patient in an extremely unusual site of left upper buccal vestibule. Since the site of the tumour is extremely rare, increased awareness of such cases is essential, and they should be included in the differential diagnosis of cheek masses especially in young female patients.

INTRODUCTION

A 30 year old otherwise healthy female presented with an asymptomatic swelling in the left cheek of 3 months duration. (Fig 1 - Submucosal mass in the upper left buccal vestibule) The size of the swelling was reported to have remained the same since it was noticed 3 months back. Examination revealed no obvious facial asymmetry. Well defined swelling was visible in the depth of the buccal vestibule corresponding to the maxillary left premolars. The overlying mucosa was intact and the swelling was freely movable, non-tender and firm in consistency. There was no evidence of any pathology associated with the teeth in the region. A periapical radiograph taken of the teeth in the region confirmed absence of caries and periodontal disease. The trabecular pattern of bone showed no alterations. A benign lesion of minor salivary gland origin was considered as a likely diagnosis. After containing the consent from the patient the lesion was excised and send for histopathologic examination. (Fig 2 - Specimen after excision).

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Differential diagnosis

The swelling in the present case was in the substance of the left cheek in the buccal vestibule. Although Fibrosed mucocele was considered as working diagnosis, benign neoplasm of minor salivary gland such as Pleomorphic adenoma, Warthin's tumour etc. were also contemplated. Pleomorphic adenoma is the most common minor salivary gland tumour.¹The smaller the salivary gland that is affected, the more likely it is to be a malignant tumour. 50% of all tumors derived from the minor salivary glands are reported to be malignant, adenoid cystic carcinoma being the most malignant tumour.²Their differentiation from benign lesions is not possible without histopathology. Also in the list of differential diagnosis, benign tumors of connective tissue origin such as fibroma, neurofibroma such as solitary fibrous tumour, lipoma were also considered. Fibroma is a benign neoplasm due to proliferation of fibroblasts, mostly due to inflammation or chronic irritation. Clinically it presents as a sessile or pedunculated firm mass with smooth overlying mucosa varying in size from few millimetres to centimetres. Although ubiquitous in nature, the most common location is the buccal mucosa followed by labial mucosa, tongue and gingiva.

Neurofibroma is derived from nerve sheath cells, considered as either a hamartoma or reactive process rather than a neoplasm. Most often neurofibromas are part of Von Recklinghausen's Neurofibromatosis. Solitary fibrous tumors are most common in young adults and present as slow-growing, soft painless lesions that vary in size from small nodules to large masses. The skin is most frequently involved. The most common intraoral sites are the tongue and the buccal mucosa. Lipomas are the most common soft tissue mesenchymal neoplasms, with 15–20% of cases involving the head and neck region & only 1–4% affecting the oral cavity.³ These are slow enlarging mass with a soft, smooth-surface. When it is superficial, there is a yellow surface discoloration. The lesion may be pedunculated or sessile and occasional cases show surface bosselation.



Fig. 1.



Fig. 2.

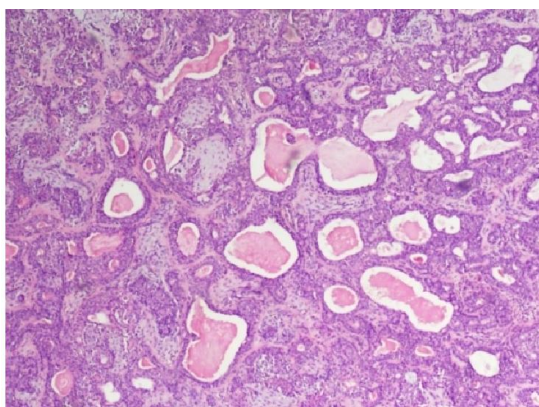


Fig. 3.

Histopathologic findings

The microscopic findings revealed the presence of a well encapsulated lesion. The epithelial component of the tumor was evident in the form of small ducts and cystic spaces filled with eosinophilic coagulum. The mesenchymal component demonstrated diverse histological patterns like myxoid and chondroid areas. Areas of normal salivary gland with normal lobular architecture was also seen. Correlating with the clinical findings, the histopathological features were suggestive of Pleomorphic adenoma (minor salivary gland). (Fig 3 - H & E; 20x magnification - Photomicrograph showing presence of myxoid, chondroid, ductal and cyst like spaces filled with eosinophilic coagulum)

Follow up

At 6 months follow up, the patient was asymptomatic with no evidence of recurrence.

DISCUSSION

Pleomorphic Adenoma (PA) is the most common salivary gland tumour.¹ It accounts for 53 – 77% of parotid tumor, 44–68% of submandibular tumor & 6.4% of minor salivary gland tumour⁴. Palate is the most common intra oral site (42.8 – 68.8%), followed by upper lip (10.1%) & cheek (5.5%).⁵ Females in the 3rd to 5th decades are commonly affected⁶. It usually presents as a well circumscribed, slow growing, painless, firm swelling that does not cause ulceration of the overlying mucosa. There are three histologic subtypes – myxoid (80% stroma), cellular (myoepithelial cells predominating) and mixed (classic).⁶ The ideal treatment for pleomorphic is wide local excision with sufficient safety margins. The potential risk of the PA becoming malignant is about 6%.⁷ A recurrence rate of 2–44% has been reported in the literature which may be attributed to inadequate removal or spillage of tumor cells at the time of surgery which necessitates a long term follow up.⁶

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