Case Report

Pleomorphic adenoma of the palate

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ABSTRACT

Pleomorphic adenoma (PA) is the most common salivary gland tumor, accounting for about 40–70% of all major and minor salivary gland tumors. The commonest sites for intraoral PA are palate, buccal mucosa and lips. Palatal PA presents clinically as a painless, slow-growing mass found on posterior lateral aspect. The aim of this article is to present a case of palatal PA, which was treated successfully by surgical excision.

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Introduction

Pleomorphic adenoma (PA) can be defined as a benign mixed tumor composed of epithelial and myoepithelial cells arranged with various morphological patterns, demarcated from surrounding tissues by fibrous capsule. PA (mixed benign tumor) is one of the salivary gland tumors affecting both major and minor salivary glands and accounts for 40–70% of all tumors.[1] Parotid gland is the most commonly affected of the major group, and palate is the most common site of the minor salivary glands affected. Other intraoral sites of this tumor are the lip, buccal mucosa, floor of the mouth, tongue tonsil, pharynx, and retromolar area.

Case Report

A 45-year-old female patient reported to our dental OPD with a complaint of painless swelling in the upper left palatal region for the past 1 year. Her medical history was not significant and she denied drug allergy. On intraoral examination, a single ovoid mass measuring 2 cm × 2 cm [Figure 1] in diameter was found at the junction of hard and soft palate on the left side. The mass was asymptomatic, slow-growing, firm, with smooth surface, and no radiographic evidence of bone involvement was seen.

Clinical differential diagnosis was a benign salivary gland tumor, possibly PA, neuroma, neurofibroma, palatal abscess.

After routine preoperative investigations, the case was planned for surgical excision. Under local anesthesia, excision of the mass was carried out, including the overlying mucosa with 1 cm margin at the periphery [Figure 2]. A tincture Benzoin gauge was then placed over the defect and sutured to the wound margins. The pack was removed after 2 weeks and postoperative healing was uneventful [Figure 3]. Histopathologic report showed the presence of myoepithelial cells and ducts lined by cuboidal cells and it confirmed the lesion to be "pleomorphic adenoma" [Figure 4].

Discussion

PAs are derived from a mixture of ductal and myoepithelial elements.[2] It is the commonest benign salivary gland tumor; 84% of the PAs occur in the parotid, 8% in the submandibular, and 4–6% in the minor salivary glands.

Incidence

Females are more affected than males, with a ratio of 2:1. It occurs in the fourth and fifth decades of life, but may

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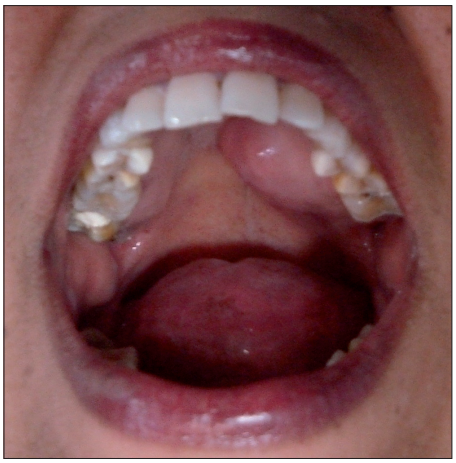

Figure 1: Preoperative view

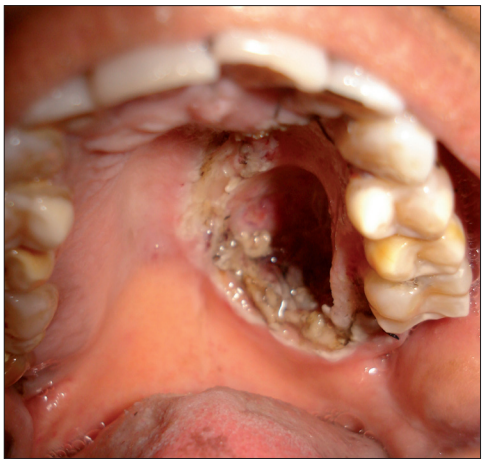

Figure 2: Two days after resection, showing granulating wound

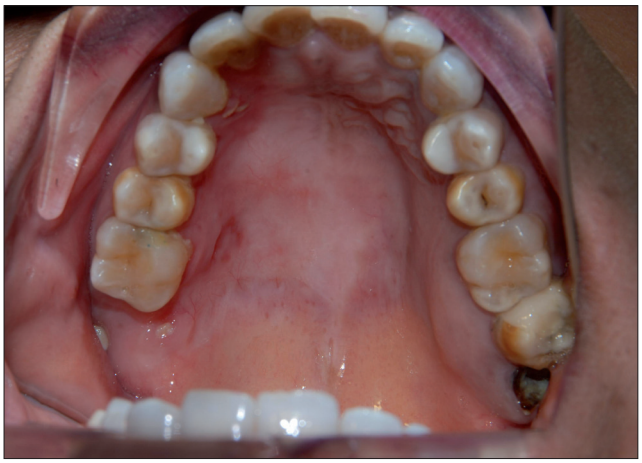

Figure 3: 6 months postoperative view

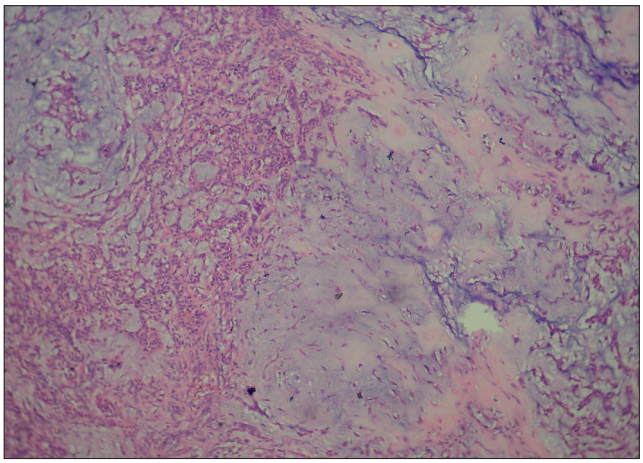

Figure 4: Histopathologic view

arise at any age. PA is the most common benign tumor of the minor salivary glands. The most common site of this tumor is the palatal area (approximately 73%),[1,3] followed by upper lip (17%),[4] buccal mucosa, floor of the mouth, tongue tonsil, pharynx, and retromolar area. Review of literature reports a few cases of PA arising in the parapharyngeal space.

It arises in the oral cavity as a painless, slowly growing, firm swelling, commonly seen on the posterior lateral aspect of the palate, presenting as a smooth, dome-shaped mass.[5] Because of tightly bound nature of the hard palate mucosa, it appears to be fixed. While in cases of lips and buccal mucosa, it is freely movable. PA of palate is seldom allowed to attain a size greater than 1–2 cm in diameter because it causes difficulty in mastication, speech, and swallowing. It is detected and treated earlier than tumors of major salivary glands.[1]

If the overlying mucosa is ulcerated and ulceration is not due to any trauma or biopsy, malignancy should be suspected.

Computed tomography (CT) scan is the important diagnostic tool of these tumors;[6] it helps to determine the extension of the lesion. It cannot invade bone but may lead to a cupped out resorption of bone due to pressure effect.

Histopathologic findings

It is an epithelial tumor of complex morphology, possessing epithelial and myoepithelial elements arranged in varieties of patterns and embedded in mucopolysaccharide stroma. Formation of the capsule is a result of fibrosis of the surrounding salivary parenchyma which is composed of the tumor and is referred to as false capsule.[2]

Tumors of hard palate are usually excised down to the periosteum, including the overlying mucosa with 1 cm clinical margins at the periphery.[3] Excision of palatal bone is not required as periosteum is an effective anatomical barrier. If the tumor extends to soft palate, the excision includes the fascia over muscles of soft palate.

PA generally does not recur after adequate surgical excision. Reasons for recurrence include incomplete excision, seeding, cutting through the microscopic extracapsular projections thereby leaving some tumor behind, or rupture of the capsule and accidental seeding of tumor cells, as is more likely to occur when dissecting close to the capsule.[6] Our patient has been followed up for 6 months, has excellent healing with no complaints and no signs of recurrence.

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