CASE REPORT

Pleomorphic Adenoma Of The Palate: A Case Report

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Abstract

Salivary gland tumors are rare and account for 2–3% of tumors occurring in the head and neck. Pleomorphic adenoma is a benign neoplasm which is commonly encountered in the parotid gland and other major salivary glands. At times they can also develop in minor salivary glands of the palate. The majority of minor salivary gland tumors are malignant. This case report describes a case of mixed tumor in a minor salivary gland of the hard palate.

Keyword: pleomorphic adenoma, minor salivary gland tumor

Introduction

Pleomorphic adenoma (PA) is the most common neoplasm of the large salivary glands and affects mostly the parotid gland, less frequently the accessory salivary glands. It is also known as “mixed tumor, salivary gland type”, which describes its pleomorphic appearance as Corresponding to small glands, the palate is the most common site for mixed tumor. Another region that is frequently affected by the tumor is the lips.

A small minority of tumors are located in the oral cavity, neck and nasal cavity [1–3]. Other intraoral sites include the buccal mucosa, tongue, floor of mouth, tonsil, pharynx, retromolar area, gingiva and nasal cavity [1, 4], opposed to its dual origin from epithelial and myoepithelial elements. Mixed tumor accounts for 73% of all salivary gland tumors.

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Excision of the mass was done under anesthesia (Fig. 2). the Department of oral & maxillofacial Surgery in the kothiwal Dental College, complaining about a painless swelling on the left side of hard palate since 3 years. History revealed that the tumor was growing slowly. Intraoral examination revealed an oval-shaped, circumscribed lesion, adherent to the underlying structures, covered with slightly erythematous palatal mucosa (Fig. 1). The size of this lesion was about 4.5cm in diameter, extending from 24 to 27 regioanteroposteriory and superoinferiorly from gingival level to midline. The overlying mucosa was smooth and intact but was stretched and thus shiny in comparison with the healthy area on the opposite site of the palate. Then on palpating it is firm in consistency and The checkup CT scan (Fig. 4) did not reveal pathological changes in the bone structures and then due to the clinical examination, outlook and the history of the disease the decision concerning surgical excision of
the lesion was made. Excision of the mass was done under anesthesia (Fig. 2).

The whole tumor mass was separated out with careful dissection. Mucosa around the lesion was marked and incised using the surgical blade. Then the wide dissection was performed and the whole encapsulated tumor mass was excised (Fig. 3) along with the mucoperiosteum. The wound was sutured and the mass sent for histopathological examination. The patient is still on followup since 6 months.

Discussion
Tumors occurring in the small salivary glands account for 20–40% of all salivary gland tumors, precisely 22%, according to Spiro [8]. The smaller the salivary gland that is affected, the more likely it is to trigger a malignant tumor [9]. Mixed tumor of the minor salivary glands affects mostly patients in their fourth to sixth decades, with a predominance of females. Clinically pleomorphic adenoma presents as a slow-growing, asymptomatic, unilateral firm mass that may become large if untreated.

The smaller the salivary gland that is affected, the more likely it is to trigger a malignant tumor [9]. Mixed tumor of the minor salivary glands affects mostly patients in their fourth to sixth decades, with a predominance of females. Clinically pleomorphic adenoma presents as a slow-growing, asymptomatic, unilateral firm mass that may become large if untreated. When originating in the minor salivary glands, in most cases it occurs on the soft and hard palate due to the highest concentration of salivary glands there and is typically a firm or rubbery submucosal mass without ulceration or surrounding ulceration [5, 10].

Computed tomography scan and MRI can provide information on the location and size of the tumor and extension to surrounding superficial and deep structures. Fine-needle aspiration cytology and incisional biopsy can aid in the diagnosis. The treatment is strictly wide local excision with the removal of periosteum or bone if they are involved.

The differential diagnosis for this case includes palatal abscesses, odontogenic and non-odontogenic cysts, soft tissue tumors such as fibroma, lipoma, neurofibroma, neurilemmoma, and lymphoma as well as other salivary gland tumors.

Differentiation between benign and malignant tumors is not possible without histopathology [3]. Enucleation of pleomorphic adenomas leads to a high recurrence rate, so it should be avoided.

Surgical exposure of the tumor or tumor capsule risks spillage and dramatically increases the risk of recurrence,
but pleomorphic adenomas of the minor glands have little propensity for recurrence (a recurrence rate of 2 to 44%, but mainly of the parotid gland). Inadequate surgical procedure was reported to be the main cause of failure. The most frequent surgical issues are pseudopodia, capsular penetration and tumor rupture.

Reconstruction of the palate is a challenging endeavor. As with any defect, thinking about the goals of reconstruction from both a functional and esthetic point of view will help decide which approach is most suitable for the patient. Soft tissue defects of the hard palate are essentially a nonissue, as the hard palate can be left to granulate. Bony defects in a dentate patient can be treated conservatively with an obturator. Bony defects of the upper alveolar ridge will cause a significant cosmetic and functional deformity, and therefore free tissue transfer techniques will augment the anterior projection of the face and the soft tissue can be used to seal the oral cavity from the nose.

References


