Pleomorphic adenoma: A case report

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Abstract

Pleomorphic adenoma is benign salivary gland tumor. Pleomorphic adenoma (PA) is the most common neoplasm of large salivary glands and affects mostly the parotid gland, less frequently the accessory salivary glands. It derives its name from the architectural pleomorphism seen by light microscopy. Keywords: Pleomorphic adenoma, submucosal mass, differential diagnosis

Introduction

Pleomorphic adenoma is a benign salivary gland tumor. The aetiology is unknown but it has been suggested that prolonged exposure to radiation and the simian virus (SV40) may play a role in the development [1, 2]. 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 derives its name from the architectural pleomorphism seen by light microscopy. It is also known as “mixed tumor, salivary gland type”, which describes its pleomorphic appearance as opposed to its dual origin from epithelial and myoepithelial elements. Mixed tumor accounts for 73% of all salivary gland tumors. 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 [3-5]. Pleomorphic adenoma usually presents clinically as a painless, slow-growing mass, varying from 2-6 cm when resected [6]. When originating in the minor salivary gland most frequently occurs on hard and soft palate as there is highest concentration of minor salivary glands there and is present clinically as a firm or rubbery submucosal mass without ulceration or surrounding ulceration [6, 8].

Case report

A 27 old male patient came to the department of oral medicine and radiology with the chief complaint of painless swelling on the hard palate present since 8 years. The growth was slow in onset progressive in nature. Intraoral examination reveals the swelling was solid nodular sessile with broad base with smooth surface, slightly bluish in color, measuring about 2 cm in dimension present on the midline of the hard palate. The growth was firm rubbery in consistency fixed to the underlying tissue with no radiographic evidence of bone involvement was seen. Clinical differential diagnosis was a benign salivary gland tumor, possibly PA, neuroma, neurofibroma, palatal abscess, odontogenic and non odontogenic cysts and rare entities like lymphoma, fibroma, lipoma were considered. Palatal abscess was ruled out after clinical examination does not revealed any non vital tooth in the vicinity. Odontogenic and non odontogenic tumors could be ruled out by aspiration of the lesion and by exploration into the tissue since it did not demonstrate cystic nature. After routine preoperative investigations and after obtaining the informed consent of the patient the case was planned for incisional biopsy. Under local anesthesia, biopsy specimen of about 4mm was taken the biopsy specimen revealed myxoid and fibrocollagenous stroma in the background of myoepithelial cells with occasional ductal structure. The patient was followed for 3 for any recurrence in the future.
Discussion

Pleomorphic adenoma presents as a slow growing, asymptomatic, firm mass that may become large if left 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 [7,8].

In our case the tumor was present on the hard palate which is the most common site for minor salivary gland tumor in the oral cavity. The tumor was slow growing, was present since 8 years and was progressive in nature.

The proportion of each of these elements varies widely and one or the other is often predominant. The “cellular” type of pleomorphic adenoma is one in which the epithelial element predominates, whereas the “myxoid” type is composed mostly of a myxomatous or myxochondromatous mesenchymal-like element. The “mixed” type is a classic form. Distinctive epithelial cell types include spindle, clear, squamous, basolaid, cuboidal, plasmacytoid, oncocytic, mucous and sebaceous [9, 10, 11]. In our case the tumor presented with myxoid and fibrocollagenous stroma with myoepithelial background and occasional ductal structure.

Alves et al. reported that tumor occurred commonly between the 3rd and 5th decade of life and 60% of the patients were females. In our case the patient was in his 3rd decade of life and was male patient [12].

Pleomorphic adenoma is diagnosed on the basis of history, clinical examination cytology and histopathological reporting. The incisional biopsy is performed to determine the proper treatment and management of the case [13, 14].

Fig 1: Slide Showing Phelomorphic Adenoma

Conclusion

Pleomorphic adenoma should be considered in the differential diagnosis of the swellings of the hard palate swellings, whenever there is history longstanding swelling on this region.

References

7. Robert E. Marx; Oral and Maxillofacial Pathology A Rationale for Diagnosis and Treatment.