ABSTRACT

Myoepithelioma is a rare benign neoplasm of major and minor salivary glands, composed almost exclusively of sheets, islands or cords of cells with myoepithelial differentiation. Myoepithelioma represents 1.5% of all salivary glands neoplasm, most commonly occurs in parotid gland. Here, we report a rare case of myoepithelioma of hard palate.

Keywords: Contractile cell, Ectoderm, Minor salivary gland, Myoepithelial cell, Tumor.

INTRODUCTION

Myoepithelium is defined as a benign tumor composed of myoepithelial cells affecting both major and minor salivary glands and it represents 1.5% of all salivary gland neoplasms.1-3 Myoepithelial cells are contractile cells that act as smooth muscle cells, which are embryonically derived from ectoderm. They can be routinely identified in many normal tissues that have secretory functions, such as the major and minor salivary glands, lacrimal glands, sweat glands, breasts and prostate.4 In a normal salivary gland, myoepithelial cells are located between the epithelial cells and the basal lamina of acini and intercalated ducts.5 According to the World Health Organization’s classification of salivary gland tumors, ‘myoepitheliomas are characterized by a more aggressive growth pattern than pleomorphic adenomas’. Plasmacytoid and spindled are the two types of myoepithelioma.6 In this report, we describe a case of a benign plasmacytoid myoepithelioma in left side of hard palate.

CASE REPORT

A 21-year-old male reported to Department of Oral Medicine and Radiology, Sree Balaji Dental College, with the complaint of painless swelling in left side region of hard palate that had been present for 2 years. Medical, dental and personal histories were noncontributory.

Intraoral examination revealed a solitary, diffuse swelling in the left side of hard palate (Fig. 1) in relation to 23, 24, 25, 26 regions and it measured of about 3 × 2 cm in diameter. The swelling was well-demarcated with smooth surface texture. On palpation, swelling was soft in consistency and nontender. There was no involvement of cervical lymph nodes. Considering the chief complaint and clinical examination, it was provisionally diagnosed as pleomorphic adenoma in relation to the left side of hard palate.

By considering the clinical similarities, the following were given as differential diagnosis for provisionally diagnosed pleomorphic adenoma. Differential diagnostic lesions are classified as inflammatory lesion, epithelial neoplasm, ectomesenchymal neoplasm and mesenchymal neoplasm such as, palatal abscess, carcinoma of maxillary sinus, canalicular adenoma, cystadenoma, low-grade mucoepidermoid carcinoma, adenoid cystic carcinoma, lipoma, myoepithelioma, leiomyoma and osteoma respectively.

Orthopantomograph (Fig. 2) revealed an oval-shaped radiolucency measuring of about 1 × 2 cm in diameter in left side of hard palate in relation to 25, 26 regions. Computed tomography (Fig. 3) revealed soft tissue opacity in left side of palate that encroaches the left maxillary sinus.
Biopsy was done. Hematoxylin and eosin-stained section show (Fig. 4) elliptical cells with hyaline basophilic cytoplasm and eccentrically placed nuclei. The lesion predominantly consists of plasmacytoid type of cells. Histopathological report was suggestive of plasmacytoid variant of myoepithelioma.

**DISCUSSION**

The term myoepithelioma was first used by Sheldon in 1943. Myoepithelioma is a rare soft tissue tumor that are composed entirely of cells bearing close resemblance to the myoepithelial cells of salivary gland so referred as myoepitheliomas. Myoepithelioma is an aggressive tumor which occurs in adults with equal gender distribution. The size usually ranges from 1 to 5 cm in diameter, and they are well demarcated with smooth surface. They can develop with or without a capsule. In younger individuals, myoepithelioma of hard palate predominately exhibits plasmacytoid cells. Due to their infrequency and multiplicity of histopathology, myoepitheliomas present difficulties in diagnosis. The key to determining diagnostic criteria for myoepitheliomas is to study cellular morphology, cytoplasmic filament expression and ultrastructural features of neoplastic myoepithelial cells. Immunohistochemically, a large number of markers have been used for establishing the diagnosis of myoepitheliomas. The myoepithelial cells are usually found to be immunoreactive to S-100, actin and prekeratin. Cellular pleomorphism, increased mitotic activity, necrosis and invasion indicate toward possibility of malignancy.

Myoepithelioma is treated by surgical excision. Only one recurrence was noted in 16 cases in which follow-up was available.

**REFERENCES**


ABOUT THE AUTHORS

T Manigandan (Corresponding Author)
Reader, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Narayanapuram, Velachery Main Road Chennai, Tamil Nadu, India, e-mail: manident@yahoo.com

V Shivakumar
Professor and Head, Department of Periodontology, Chettinad Dental College and Hospital, Chennai, Tamil Nadu, India

B Karthika
Senior Lecturer, Department of Oral Medicine and Radiology Priyadarshini Dental College and Hospital, Thiruvallur Taluk Tamil Nadu, India

SC Selvamuthukumar
Professor and Former Head, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Chennai Tamil Nadu, India

Nalini Aswath
Professor and Head, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Chennai Tamil Nadu, India