CASE REPORT

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Pleomorphic adenoma of the palate: An unusual location of a common entity - A case report

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ABSTRACT

The most common tumor of the salivary glands is Pleomorphic adenoma (PA). Approximately, 90% of these tumors occur in the parotid gland and 10% in the minor salivary glands. The palate is frequently affected site by PAs of the minor salivary glands. Herein, we report a case of PA of the palate, presented with intraoral swelling, and conclude that complete surgical excision can be a curative treatment for this benign tumor with 2 year follow-up.

Keywords: Pleomorphic adenoma, palate, minor salivary gland tumor, surgical treatment.

1. INTRODUCTION

Salivary gland tumor accounts for 3% of all the head and neck tumors (Luna MA et al., 1991). Of these salivary gland tumors, 85-90% is benign tumors. Amongst the benign variants pleomorphic adenoma (P.A) accounts for 60% to 80% in major salivary glands and 40–70% of minor salivary glands (Khan MN et al., 2016). Involvement of parotid gland is the most common site however, it may be found in submandibular, sublingual and minor salivary glands (Jorge J et al., 2002). P.A of palate is more common (60%–65%) site for minor salivary gland tumors. The present case report describes the PA arising from palate with an unusual size.

2. CASE REPORT

A 22 year old female reported to Department of Oral and Maxillofacial Surgery, Sawangi (M), Wardha (M.S.), India with the complain of painless tumor like mass in palatal region since 5 years. The detailed history revealed progressive increment in the mass from pea nut size to golf ball size approximately at the time of presentation. The patient gave history of difficulty in eating and speech due to mass over palate. There was no associated history of any discharge, numbness, respiratory problem, and trauma. An indentation of similar size on the tongue in association with the tumor could be appreciated. She had no associated constitutional symptoms.

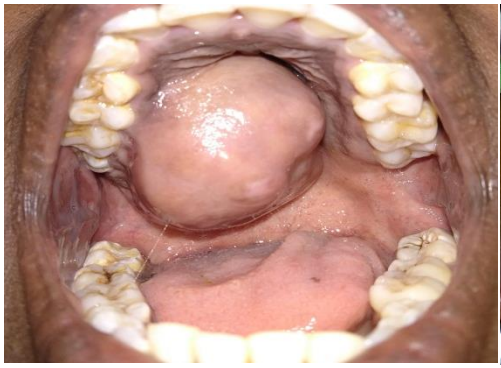

Figure 1 Intraoral lesion (pre-op)

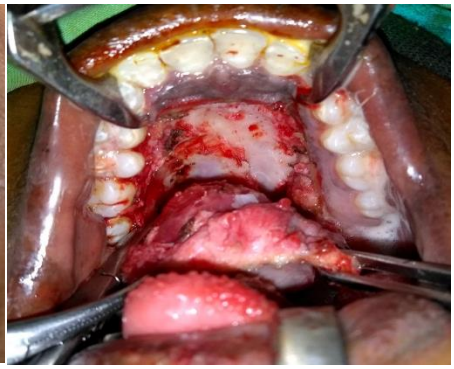

Figure 2 Surgical resection

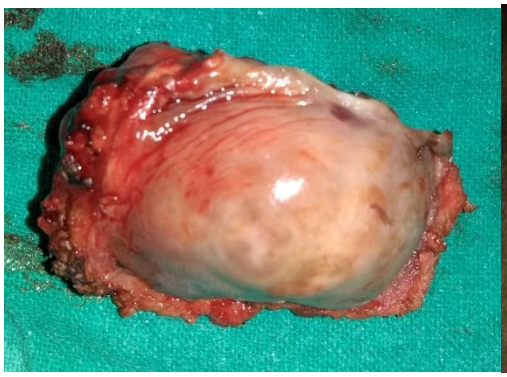

Figure 3 Resected specimen

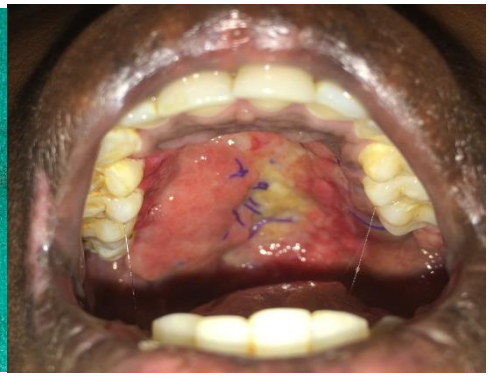

Figure 4 Intraoral (post-op)

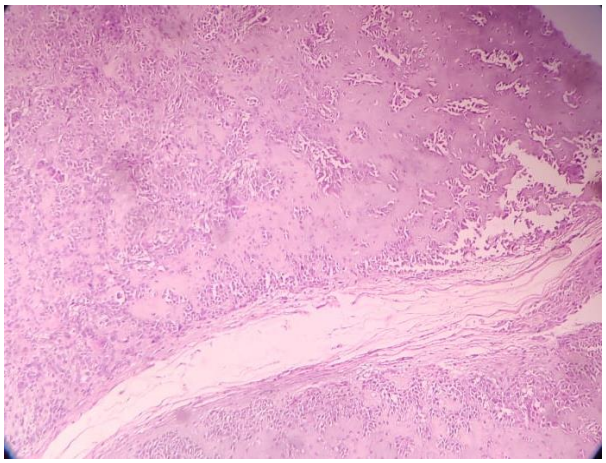

Figure 5 Histopathological scan

On palpation, all the findings on inspection were conformed and we found, a solitary, sessile, dome-shaped tumor mass of size approximately 16x15 mm covered with oral mucosa involving the palatal vault which was firm, fixed and non-tender in nature. There was no associated regional lymphadenopathy. Fine Needle Aspiration Cytology (FNAC) was performed using 23 gauge (Gupta and Bhake, 2017) needle for which the report suggestive of "Pleomorphic adenoma" (fig. 5). Wide local excision of the tumor, peripheral ostectomy and reconstruction of defect with bilateral buccal fat pad (Borle R et al., 2019) was done (fig. 1- 4). An obturator lined with gentamycin was placed for 14 post-operative days till healing occurred. We followed up the patient for 2 years and no loco-regional recurrence was noted.

Patient informed consent

A detailed written informed consent was obtained from the patient and then patient was posted for surgical intervention under general anesthesia.

3. DISCUSSION

The occurrence of the pleomorphic adenoma is more often in the age between 30 and 60 years. However, PA of is more common in young individuals in the 2nd decade of life. Females are more commonly affected than males (F:M::1.4:1) (Khan MN et al., 2016 and Laccourreye H et al., 1994). Clinically PA of palate presents as a painless, slow-growing, solitary, typically firm to rubbery submucosal mass without breach in continuity of surrounding mucosa. In literature, the size of mass ranged from 0.8 to 5 cm with an average of 2.6 cm (Khan MN et al., 2016). In our case the diameter of the mass was 5-6 cm approximately which was of unusual size. The differentiation of the tumor from palatalabscesses, odontogenic and non-odontogenic cysts, soft tissue tumors such as fibroma, lipoma, neurofibroma, neurilemmoma, and lymphoma as well as other salivary gland can be done by relating clinically, rdiographically, cytological and /or histological examination (Sreenivas SD, 2011). The radiological investigation provides size,shape,extent and involvement or relation with adjacent structures (Patigaroo SA et al., 2012).

Salivary gland tumor may arise from both ducts and myoepithelial cells and considered as "mixed tumor". The embryonic basis of origin of this tumor comprises epithelial and mesenchymal cells as well. Because of the varied histological appearance it is aptly named as pleomorphic. It contains varied patterns from cellular glandular and myxoid type to cartilaginous and/or ossified forms (Lingama RK et al., 2011). The cytological smear in our case report showed epithelial cells arranged in groups, cohesive structures and at places papillary arrangement. The cells were with round nucleus with moderate amount of cytoplasm. At places myxoid like material was seen, these were revealed as "pleomorphic adenoma".

Treatment option for PA of palate includes wide local excision of tumor including the involved capsule with a rim of clearance margin, curettage of underlying bone has to be done to avoid recurrence (De Courten A et al., 1996 and Lopez-Cedrum JL et al., 1996). Considering the role of function and esthetic reconstruction of palatal region is a challenging endeavor. To cover hard tissue defect, an obturator can be used. In our case report we reconstructed the surgical defect over palatal area with bilateral buccal fat pad. Usually recurrence does not recur after resection with clear margins. In literature rate of recurrence is documented as 2%–44% (Fidvi MZ et al., 2018). This could be because of rupture of capsule causing spillage, microscopic interruptions in the pseudo-capsule. In our study we did not reported recurrence during 2 year follow up.

4. CONCLUSION

Pleomorphic adenomas of palate are a rare entity. Ruling out from differential diagnosis can be done with correlating proper clinical examination and detailed history. Early diagnosis helps conservative treatment procedure, less morbidity. Recurrences are uncommon can be seen on long term follow-up visits.

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Conflicts of Interest: The authors declare no conflict of interest.

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