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Case Report

Management of pleomorphic adenoma of minor salivary gland- A case report

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ABSTRACT

The neoplasms of the salivary glands account about 2% of head and neck tumours and among them, the Pleomorphic adenoma is the most common form. It is benign epithelial lesion of salivary gland origin, showing histopathological variation. The pleomorphic adenoma shows female predilection. The common sites for the intraoral Pleomorphic Adenoma are palate, buccal mucosa and lips. The article presents a case of Pleomorphic Adenoma of minor salivary gland of palate, which was treated successfully by surgical excision.

1. Introduction

Pleomorphic adenoma is defined as a benign mixed tumour of epithelial and myoepithelial cells arranged with different morphological patterns, demarcated from surrounding tissues by fibrous capsule. Pleomorphic adenoma (mixed benign tumour) affects both major and minor salivary glands and accounts for 60–70% of all tumours.[1] Generally, tumour occurs in peoples of all ages, and the highest incidence is in the fourth to sixth decades.[2]

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 tumour are the lip, buccal mucosa, floor of the mouth, tongue tonsil, pharynx, and retromolar area.

These benign mixed tumours are characterized by cellular polymorphism and composed of an epithelial and myoepithelial cells and connective tissue component embedded in a stroma of mucoid, myxoid, chondroid or osteoid origin.[3,4]

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2. Case Report

A 32-year-old female patient reported to the department of Oral and maxillofacial surgery with the chief complaint of swelling in palatal region for 4 months. Patient was apparently alright 4 months back, when she noticed single small swelling in palatal region on right posterior aspect, which was initially smaller in size now increased to present size 2 months back. For 2 months swelling is neither increased nor decreased. Swelling was not associated with the pain. No history of pus and blood discharge from the swelling. No history of fever, recurrence. No history of any previous medication. No history of trauma.

On inspection- Singe well-defined swelling seen in palatal region of 16,17,18 extending antero-posteriorly from mesial aspect of 16 to distal aspect of 18 and mesiodistally from palatal attached gingiva of upper right posteriors up to mid palatal region. Measuring approximately 3x4 cm. Overlying mucosa appears normal and intact. No change in color of overlying mucosa. On palpation- Firm in consistency. Non tender on palpation. Afebrile. No evidence of caries with teeth in the same region. No

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evidence of mobility of teeth with same region and no radiographic evidence of bone involvement was seen on Ortho-pentamogram and occlusal radiograph.

Clinical diagnosis based on the findings made as benign tumor of minor salivary gland and differential diagnosis as Periapical/Periodontal abscess, Odontogenic cyst (Radicular/Dentigerous) and Mucocele. For further investigation, Ultrasonography (USG) of palate was done, according to the report - there was evidence of 4.2x2.3 cm well-defined round to oval heterogeneously hypoechoic lesion seen at hard palate on right side with multiple dense echoes and septations within. Findings suggestive of Benign lesion.

FNAC- intra oral swelling over hard palate, cytomorphological features are suggestive of Benign salivary gland neoplasm favoring Pleomorphic Adenoma. CT maxilla- A 4.2x1.4x.2.3 cm sized ill-defined heterogeneously enhancing soft tissue density mass lesion involving hard palate on right side with its extensions (with USG correlation) suggestive of Benign neoplasm. Based on Clinical, radiographic and histo-pathological examination final diagnosis made was Pleomorphic adenoma of minor salivary gland of palate. After routine preoperative investigations, the case was planned for surgical excision.

Maintaining all aseptic precautions, in the operation theatre, patient was induced under general anaesthesia. The tumour of hard palate excised to the periosteum including the overlying mucosa with approximately 1 cm safe margin at periphery. Excision of palatal bone was not done as periosteum is considered as an effective barrier in adenoma.

Pleomorphic adenoma is the benign tumour with the highest incidence (3.05/100.000 persons/year) in salivary glands, representing about 60% of neoplasms in this location.[5–7] Parotid gland is the most commonly affected location is parotid gland.[8] Most common intraoral location is palate, especially the hard palate, while occurrence in other intraoral sites includes upper lip and buccal mucosa.[9] Typically, the tumour appears as painless, slow growing and solitary. Recurrence is rare in cases of Pleomorphic adenoma after proper surgical excision. Incomplete excision of tumour, seeding, rupture of capsule may act as reason for recurrence.[10]

3. Conclusion

Pleomorphic adenoma is the most common salivary gland tumour with significant recurrence rate. Mostly the reasons for recurrence are incomplete excision, seeding, rupture of the capsule and accidental seeding of tumour cells.

In our case, the follow up of patient has been taken for 6 months and no signs of recurrence noted. Nevertheless, we need longer follow-up to draw conclusive results.

4. Source of Funding

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5. Conflict of Interest

None.

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