Pleomorphic Adenoma of Minor Salivary Gland (Palate): A Case Report  
Vivek Kumar Rai, Himanshu Gupta, Manju Ananthakrishnan Nair

ABSTRACT
Pleomorphic adenoma is one of the most common tumours of the salivary glands. It is commonly seen on palate, followed by the lips and the cheeks. These tumours are painless and slow growing. This paper reports a case of pleomorphic adenoma of the minor salivary glands of the palate in a 53-year old Indian male.  
Keywords: Minor salivary gland; Palate; Pleomorphic adenoma

Introduction
Pleomorphic adenomas are benign salivary gland tumours that represent about 3-10% of the neoplasms of the head and neck region. The palate is considered as the most common intra-oral site (42.8-68.8%), followed by the upper lip (10.1%) and the cheeks (5.5%). Minor salivary glands are located in palate, upper and lower lips, gingiva, floor of mouth, cheek, tongue, tonsillar areas, nasal cavity, para nasal sinuses, ears, jaw, pharynx, larynx, trachea and bronchi. Pleomorphic adenoma is of glandular origin in the head and neck usually presenting as a mobile slowly growing, painless firm swelling that does not cause ulceration of the overlying mucosa. This paper reports a case of pleomorphic adenoma of the minor salivary glands of the palate in a 53-year old Indian male.

Case Report
A 53 years old male patient reported to the Department of Oral And Maxillofacial Surgery with a chief complaint of a non-painful swelling on the left palatal region for the last three months. The swelling was not interfering with mastication; there was no history of trauma or fever. The patient gave a history of tobacco chewing and bidi smoking. On general examination, it was found that the patient was of normal build and height. His vital signs were normal and no abnormality was detected on his systemic examination. Extra orally, there was no facial asymmetry and lymph node were not palpable. Intra-oral examination suggested a single dome shaped swelling which approximately measured 4 cm × 4 cm, which extended ≈ 3-5 mm from the marginal gingiva in relation to the left second premolar to the left third molar region, not crossing the midline. The overlying mucosa was not ulcerated and it was mobile over the swelling. On palpation, the swelling was found to be soft in consistency, compressible and non tender. On the basis of the history and the clinical examination, a provisional diagnosis of benign tumour of the minor salivary gland was made and a differential diagnosis were palatal abscess, odontogenic and non-odontogenic cysts, malignant tumour of the minor salivary gland and lipoma were considered.

FNAC was negative, and suggested of a solid mass lesion. The radiograph of the maxilla (occlusal view) showed bony invasion (Figure 1). Excisional biopsy was planned under local anesthesia. Maxillary nerve block given by high maxillary tuberosity approach and extraction of 26, 27, and 28 was done (Figure 2). Mid tumour incision was avoided to prevent post operative necrosis of flap and oronasal communication, so that incision was placed along the alveolar crest extending from 23 to 28 and a full thickness mucoperiosteal palatal flap was reflected up to mid palatine suture and complete excision of lesion was performed (Figure 3). Surgical wound closure was done by simple interrupted suture (Figure 4). The specimen was sent for histopathological examination and confirmed lesion as Pleomorphic adenoma of salivary gland. On Fifth postoperative day patient reported with necrosis of palatal mucosa and oronasal communication. Wound debridement and irrigation was done and wound was allowed for secondary healing. Patient was kept under regular follow-up. After third month wound was healed and no communication existed between oral and nasal cavity (Figure 5).

Discussion
The mixed aspect of pleomorphic adenoma is constituted by two tissue-specific findings: the sub-differentiation of epithelium and modified myoepithelia and the amount and constitution of the stroma. Two subtypes are distinguished on routine processed slices, i.e. the stroma-rich and the stroma-poor. Muco-epidermoid carcinoma is the most common malignant salivary gland tumour, while pleomorphic adenoma is its most common benign counterpart. CT is superior to MRI in evaluating the erosion and the perforation of the bony palate, or the involvement of the nasal cavity or the maxillary sinus. MRI provides a better definition of the vertical and inferior tumour extension and it more accurately indicates the degree of encapsulation. These tumors are most often diagnosed in 4th and 6th decades of life. The typical presentation is slow growing painless firm mass, non tender and tends to be mobile when small but fixed to surrounding tissue with advanced growth.

The treatment of choice for pleomorphic adenoma in minor salivary gland is wide local excision with the removal of periosteum or bone. Simple excision would be performed to lead to high local recurrence rate and should be avoided. Rupture of the capsule or tumor spillage is also believed to increase the risk of recurrence, so meticulous dissection is paramount. Pleomorphic adenoma generally does not recur after adequate surgical excision. Imaging helps in ruling out bone erosions in these patients. Complete extirpation of the mass is curative. One word of caution is that capsule should not be breached when attempting to surgically remove the mass because breach of capsule is associated with increasing recurrence rates.
Conclusion

In conclusion, pleomorphic adenoma should be considered in the differential diagnosis of all palatal tumors. Because of its recurrence rate complete wide surgical excision is the treatment of choice with long-term follow-up.

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References


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