

# Intra Oral Benign Mixed Tumor of Hard Palate: A Case Report

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## Abstract:

**Background:** Pleomorphic Adenoma (PA) is a most common benign mixed tumor (50%) of major and minor salivary gland, comprising of myoepithelial and epithelial cells origin with various morphological patterns, demarcated from surrounding tissues by fibrous capsule. 40 to 70% of minor salivary gland tumors are PA's. The formation is seen in superficial lobe of lower pole of salivary gland (paratoid gland), the most common intra oral site is palate followed by upper lip and buccal mucosa. We report a patient with soft tissue swelling who is diagnosed as palate pleomorphic adenoma.

**Keywords:** Minor salivary glands, Pleomorphic Adenoma, Mixed tumor, Enchondroma, Palate Pleomorphic Adenoma

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## I. Introduction

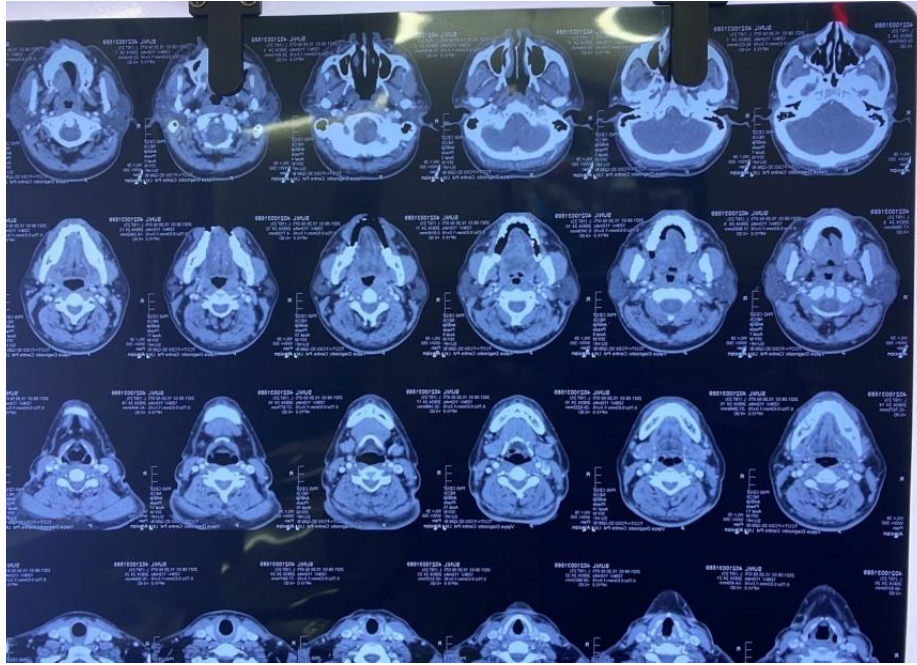
Salivary gland tumors account for less than 3% of the head and neck tumors. Among all salivary glands Pleomorphic Adenomas (PA) are most common benign mixed tumor (50%) of major and minor salivary gland, comprising of myoepithelial and epithelial cells origin hence called mixed tumor with various morphological patterns, demarcated from surrounding tissues by fibrous capsule<sup>[1-6]</sup>. The parotid gland accounts for maximum of 85% of PA's, where as sub mandibular gland and the intra oral minor salivary glands accounts for 8% and 7% respectively. They rarely rise from the minor salivary glands localized in the hard palate (42.63%), followed by the lip (10%), buccal mucosa (5.5%), retromolar area (0.7%) and the floor of the mouth. PA occur at all ages, the commonly affected age groups are the 5<sup>th</sup> and 6<sup>th</sup> decade; women are more affected than men<sup>[7-16]</sup>.

Pleomorphic adenoma appears as a firm painless mass that does not cause ulceration of the normal appearing and adjacent mucosa. The mass is generally mobile in soft tissue regions but not in the hard palate region. The lack of well defined capsule is noted in the benign mixed tumors located in the palate. The invasion of the lesion in periosteum or bone is noted in this condition and out of which 25% of benign mixed tumors can undergo malignant transformation<sup>[17-19]</sup>. The treatment of choice for pleomorphic adenoma should be wide local excision with the removal of periosteum or bone if they are involved. Simple enucleation of tumor leaves pseudo pod like microscopic extensions which may lead to high recurrence rate and should be avoided<sup>[20-21]</sup>. We report a case of benign pleomorphic adenoma of the palate in a 34 years male patient.

## II. Case Summary

A 34 year old male patient reported to the outpatient department with chief complaints of painless ulceration at soft tissue and swelling in the oral palatal region since 4 years. On examination the overlying mucosa was intact but bulging at places. It was ulcerated, non tender, firm and immovable at underlying region measuring 3.5 × 1.5 cm. Biopsy was not performed in this patient because there was bleeding at soft tissue and necrotic. Fine needle aspiration cytology reports suggested Pleomorphic Adenoma of minor salivary gland.

CT scan of neck (plain and contrast) revealed well defined isodense lesion along left posteriolateral of hard palate and adjacent soft palate. Lesion extending upto midline, exophytic into oral cavity causing compression of tongue. Lesion measures approximately 3.7 × 2.4 × 2.2 cm. CT scan of Para Nasal Sinuses revealed normal.



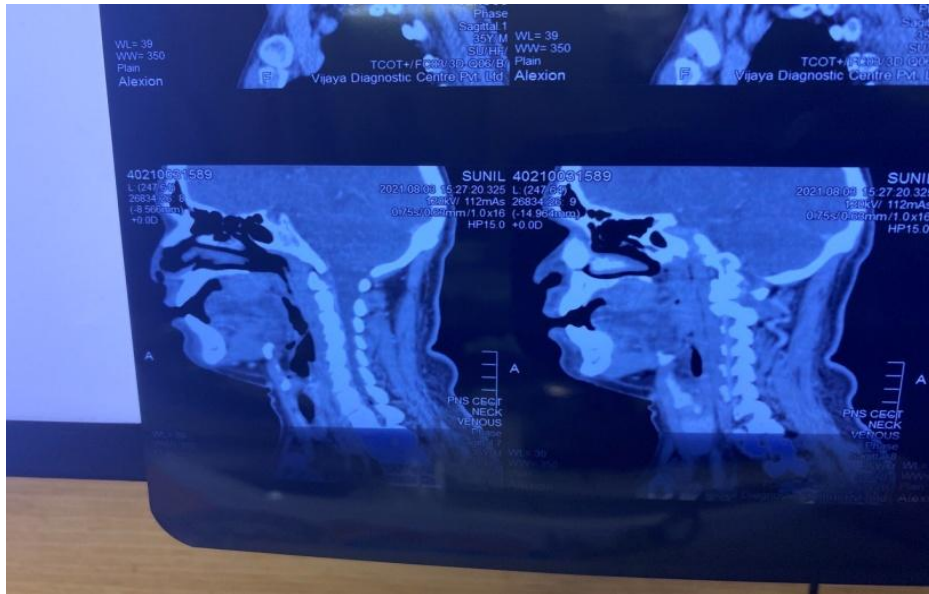


Fig 1,2,3 showing CT scan of head and neck, CT scan of PARA Nasal Sinuses

Histopathological investigations were done. On gross examination soft tissue measuring 3.5×3.5×1.5cm with mucosal ulceration of size measuring 1×1cm. The surface is irregular grey brown mass.

Microscopic examination shows tumor mass well encapsulated with very small areas of ductal component forming inner layer of cysts and tubules. Myoepithelial cells are seen scattered in the stroma which is chondromyxoid. Margins shows minor salivary gland tumor.

The patient was admitted and operated upon, under general anaesthesia. Wide local excision and flap reconstruction was done. There was no complication post operatively and the raw area healed with in 1 month.



Fig.4 showing swelling on left side in intra oral cavity before surgery.



Fig.5 showing healing tissue after surgery

### III. Conclusion

Pleomorphic adenomas of palate are rare salivary gland tumor, which is challenging for pathologist, radiologist and surgeon because of its diverse histopathological and topographical property. The diagnostic investigations with FNAC and radiological investigations are necessary due to higher risk of malignancy in minor salivary glands as compared to tumors of major salivary glands. For accurate histopathological diagnosis, excisional biopsy is a mandatory. PA generally doesn't recur after adequate surgical wide excision. Long term followup of the patient is necessary as the chances of recurrence exist.

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