

## PLEOMORPHIC ADENOMA OF THE SOFT PALATE: A CASE REPORT

### Otorhinolaryngology

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### ABSTRACT

Most common type of salivary gland tumors are pleomorphic adenoma. These slow growing tumors most often affects the parotid gland (60 – 70 percent) or submandibular glands. It occurs less frequently in a minor salivary glands. Most palatal tumors are pleomorphic adenomas, since minor salivary gland tumors are more likely to become malignant than tumors of the major salivary glands, rapid diagnostic assessment is necessary. We present a case of 50 years old man presented with gradually progressive swelling in soft palate diagnosed as benign tumor of minor salivary gland, treated by surgical excision.

### KEYWORDS

Soft palate, pleomorphic adenoma, salivary gland tumor, excision

### INTRODUCTION

A fibrous capsule separates the benign mixed tumor known as pleomorphic adenoma (PA) from the surrounding tissues. It is made up of both epithelium and myoepithelial cells that are organized in different morphological patterns. Between 40% and 70% of all cancers are salivary gland tumors, or PAs, which can affect minor and major salivary glands(1) The major salivary gland most often affected is the parotid gland. Between 13.9% and 51.4% of salivary gland tumors worldwide originate from an intraoral location, with 34.7% to 67.1% of these being benign.(2)

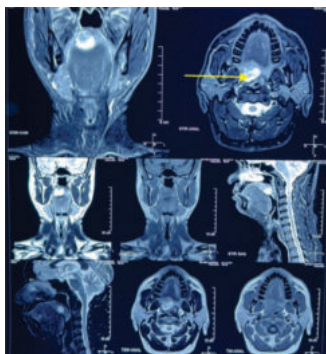
The palate is most frequently affected by PA (42.63%) among intraoral salivary glands, followed by the lip (10%), buccal mucosa (5.5%), retromolar area (0.7%), and floor of the mouth.(3) This tumor presents with a variety of topographical and histological features. There are numerous differential diagnoses for this tumor, and aberrant appearances are not unusual(4)

### CASE REPORT

A 50-year-old man reported to the outpatient department of ENT with complaint of painless swelling, gradually progressive in palatal region since 1 month, associated with difficulty in swallowing for solids.

On clinical examination, there was 3×4 cms well demarcated, smooth swelling over right side of soft palate just abutting hard palate.

MRI neck with contrast done showed well defined mixed intensity with predominantly high signal intensity lesion of size measuring 2.3x2.2x3.2 cms seen at the posterior aspect of the hardpalate(FIG 1) On contrast study, the lesion showed enhancement. Anteroinferiorly, lesion is seen abutting posterior one third of tongue; Posteromedially, causing oropharyngeal airway narrowing; Inferolaterally, extending upto lateral pharyngeal wall on right side, with no obvious bony erosion.



**Fig 1:** MRI neck with contrast: showing high signal intensity lesion in soft palate.

With the above findings, a diagnosis of benign lesion of palate was made and the case was planned for Laser assisted Complete Excision of the soft palate mass under General anaesthesia(FIG 2). Mass was excised intoto(FIG 3) using carbondioxide laser and the mucosal defect was closed using 3-0 vicryl(FIG 3)



**Fig 2:** Surgical excision of mass



**Fig 3:** Excised Soft Palate Mass



**Fig 4:** Closure Of Mucosal Defect

The mass was sent for biopsy and the histopathological report showed

- Neoplastic tissue composed of ductal epithelial and myoepithelial cells with stroma showing myxoid changes.
- Squamous metaplastic changes with fibrosis and sclerosis are seen intervening neoplastic cells.
- Focal areas showed cholesterol clefts and multinucleated giant cells.

- Minor salivary gland is seen in periphery of the lesion.

Features suggestive of Pleomorphic adenoma.

After 6 months of follow up, there has been no recurrence.

### DISCUSSION:

Adjacent salivary gland tumors are quite uncommon. The preference location of accessory salivary tumors (found in two-thirds of cases) is the palate, which contains more than 50% of the accessory glands split equally between the hard and soft palate. Usually developing between the third and fifth decade of life, pleomorphic adenoma of the soft palate or roof of the mouth.

Less than 4% of all head and neck tumors are salivary gland tumors. Adults are frequently diagnosed with these tumors. Pleomorphic adenoma is the most prevalent histological kind of salivary gland tumor, accounting for roughly 70% of cases. Of these, 84% occur in the parotid gland, 8% in the submandibular gland, and 4-6% in the minor salivary glands. Palate tumors account for 70% of small salivary gland cancers, with upper lip and buccal mucosa being the next most prevalent intraoral sites.(4)

Usually, they appear as a single-sided, painless lump in the parotid gland that grows slowly.

On the other hand, they usually appear as a firm or rubbery submucosal mass without ulceration or surrounding inflammation when they originate in the hard or soft palate. The differential diagnoses for this case include abscess, odontogenic and non-odontogenic cysts, and other soft tissue tumors. Abscess ruled out due to loss of signs and symptoms of inflammation, whereas cysts are not firm in consistency. Predominantly, pleomorphic adenoma is non capsulated and the risk of malignancy is 6%(4) Histologically, it is highly variable. Common diagnostic modality is FNAC, CT and MRI to look for extent of soft tissue invasion, any bone erosions and plane of the mass.

Main stay treatment for pleomorphic adenoma of soft palate is complete surgical excision. In this case, we approached intraorally and excised the mass in toto. Patient was on regular follow up for six months and free of symptoms.

### CONCLUSION:

In summary, diagnosis of pleomorphic adenoma of small salivary glands necessitates a high index of suspicion due to its relative rarity. The preferred course of treatment is complete broad surgical excision. Compared to late diagnosis and surgery, early diagnosis and surgical excision leads to a full cure with little to no morbidity. Long-term follow-up is required because malignant transformation and recurrence following years of surgical excision should be taken seriously.

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