



## Pleomorphic adenoma of upper Lip: A rare entity

Archana Chaurasia, Gaurav Bhagia, Shreya Chitkara

Department of Oral and Maxillofacial Surgery, Institute of Dental Sciences, Bareilly, Uttar Pradesh, India

### Abstract

Pleomorphic adenoma, also known as a benign mixed tumour, is the most common salivary gland tumour and comprises up to 60 to 70% of all benign salivary gland neoplasms. Pleomorphic adenoma appears as a painless firm mass and, in most cases, does not cause ulceration of the overlying mucosa. Generally, it is mobile, except when it occurs in the hard palate. Lesions of the palate frequently occurs & lip being the uncommon site of occurrence. Approximately 25% of benign mixed tumours undergo malignant transformation. Treatment for the pleomorphic adenoma is radical surgery. Inadequate resection leads to local recurrence. Here we are presenting a case of 45-year-old male patient who reported to our department with a chief complaint of solitary, firm growth over front teeth region for 1 year; for which excisional biopsy was done under local anaesthesia with histopathological revealed it as pleomorphic adenoma of upper lip.

**Keywords:** tensile bond strength, 8<sup>th</sup> generation adhesives, 7<sup>th</sup> generation self-etch adhesives, fracture mode

### Introduction

Pleomorphic adenoma, commonly known as a benign mixed tumour, is the most prevalent salivary gland tumour, accounting for 60 to 70% of all benign tumors of the tumors <sup>[1]</sup>. The term "pleomorphic adenoma" was coined by Willis to describe the tumour's distinct histopathologic features. It generally affects the main salivary glands, mainly affecting the tail of parotid gland. It also involves minor salivary glands in less frequency as compared to major salivary glands. The lips are uncommonly affected sites, and palate being the most prevalent accounting for about 20-40 % of all intraoral sites of pleomorphic adenoma <sup>[3, 4]</sup>. Pleomorphic adenoma affecting the salivary glands (minor) vary with a wide age range, but presentation in the fourth decade is found to be the most common. In the previous reports, the male-to-female ratio for this tumour ranged from 1:1.1 to 1:2.5 <sup>[4, 5]</sup>. It is characterised histologically by a wide range of tissues with epithelial cells present in a cord-like cell fashion, as well as areas of squamous differentiation or plasmacytoid myoepithelial cells, which produce plenty of extracellular matrix in the chondroid, collagenous, mucoid, and osseous stroma. Because there is a 6% chance that the pleomorphic adenoma may become malignant, long-term monitoring is essential <sup>[6]</sup>.

In this case report, we report a case of Pleomorphic adenoma of upper lip from clinical, histopathological and surgical point of views, that reported and was treated at our department of oral & maxillofacial surgery, institute of dental sciences, bareilly.

### Case Report

A 45 years old male patient presented to our department of oral & maxillofacial surgery institute of dental sciences bareilly, with a chief complaint of growth over maxillary anterior teeth region for 1 year. The patient gave previous history of extraction of 11 under local anaesthesia 1 year back which was uneventful followed by prosthesis fabrication for the same edentulous region 4 months back. The patient also gave history of long-term impingement of the fabricated prosthesis over the mucosa which eventually lead to inflammation since 3 months and a solitary growth which was gradually progressive and with increasing dimensions over the time it was further not associated with any other signs and symptoms. The patient had history of Diabetes since 5 years for which patient is on regular medications. He also gave history of tobacco since 7 years with an average consumption of 1-2 packets per day.

On clinical examination there was no relevant extraoral finding. On Intraoral examination, there was a solitary oval growth of size approx 2 x 1 cm which was present in respect to labial mucosa of maxillary anterior region; which was pale pink in color, smooth and shiny in appearance, well defined borders from left to right lateral incisors and was tender on palpation and soft to firm in consistency. There was no associated discharge also.

On radiological examination done with OPG, it revealed no relevant findings in respect to associated findings found intraorally.

The treatment was planned for excisional biopsy under local anesthesia. Under all aseptic conditions, the surgical site was prepared with 10% povidone iodine and patient was draped accordingly followed by administration of B/L infraorbital block and local infiltration with 2% LOX with 1:80,000 Adr. Then with the help of 15 No. Surgical Blade, Incision was given along the most prominent margin of the growth and was exposed by dissecting in all planes with help of tissue dissector and the growth was excised in toto. Complete closure was

achieved with 3-0 vicryl and pressure pack was given. The excised mass was then sent for histopathology assesment which thereafter was reported as pleomorphic adenoma and no complications were observed intra or post operatively.

### Discussion

Pleomorphic adenoma is the most prevalant benign tumor of the minor salivary glands. Females are more affected than males. These tumours are most commonly discovered in people in their 4th and 6th decades of life. The normal appearance is a slow-growing, painless, solid mass that is nontender while tiny but becomes adhered to the surrounding tissue as it grows larger <sup>[7]</sup>. If the tumour is properly removed, the prognosis is favourable. The parotid gland (about 75%), the submandibular gland (roughly 5%–10%), and the minor salivary gland (around 5%–10%) are the most common locations among the main salivary glands (approx 10%) <sup>[8]</sup>. The hard palate and soft palate are the most typical locations for small salivary glands, while the lip is rare <sup>[9]</sup>. Pleomorphic adenoma of the lip is an uncommon phenomenon, thus identifying it as an epithelial tumour with complex shape, epithelial and myoepithelial components grouped in various patterns, and embedded in mucopolysaccharide stroma necessitates a high index of suspicion.

The treatment of choice is a full broad surgical excision. Long-term follow-up is required since recurrence after many years following surgical excision, as well as malignant change, should be a worry.

### Conclusion

Pleomorphic adenoma of the upper lip presents as a rare case. FNAC is a valuable diagnostic adjuvant in preoperative evaluation of any lesions of the salivay glands. The ultimate treatment lies in the surgical excision of the complete mass. Although it is very difficult to diagnose the salivary gland diseases, histopathology is the only gold standard for diagnosis of all lesions. The patient should be kept in follow up to check for its recurrence or any malignant transformation.



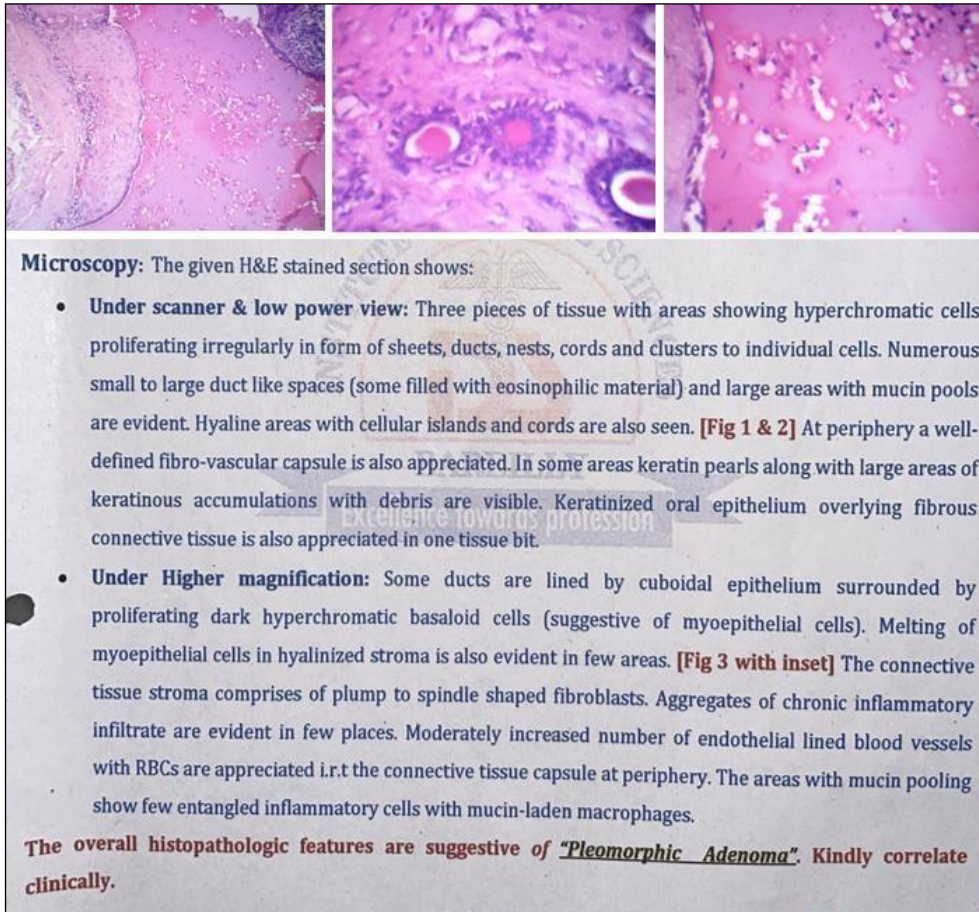
**Fig 1 and 2:** Pre-operative photograph showing growth present over labial mucosa of maxillary anterior teeth region.



**Fig 3 and 4:** Surgical marking of the growth followed by exposure and excision of the tissue.



**Fig 5 and 6:** Excised tissue that was sent for Histopathological examination



**Fig 7:** Post-operative photograph of the surgical site

### References

1. Subhashraj K. Salivary gland tumors: a single institution experience in India. British Journal of Oral and Maxillofacial Surgery,2008;46(8):635-8.
2. Sood A, Chung S, Datiashvili RO. An incidental finding of pleomorphic adenoma of the minor salivary glands in the skin area of the lower lip. Eplasty,2014, 14.
3. Chaudhry A, Vickers R, Gorlin R. Intraoral minor salivary gland tumors: an analysis of 1,414 cases. Oral Surgery, Oral Medicine, Oral Pathology,1961;14(10):1194-226.
4. Eveson J, Cawson R. Tumours of the minor (oropharyngeal) salivary glands: a demographic study of 336 cases. Journal of Oral Pathology & Medicine,1985;14(6):500-9.
5. Chaudhry A. Clinico-pathologic and histogenetic study of 189 intraoral minor salivary gland tumors. J Oral Med,1984;39:58-78.
6. Lotufo MA, Júnior CA, de Mattos JP, França CM. Pleomorphic adenoma of the upper lip in a child. Journal of oral science,2008;50(2):225-8.
7. Bailey BJ, Johnson JT, Newlands SD. Head & neck surgery--otolaryngology: Lippincott Williams & Wilkins, 2006.

8. Bentz BG, Hughes CA, Lüdemann JP, Maddalozzo J. Masses of the salivary gland region in children. *Archives of Otolaryngology–Head & Neck Surgery*,2000;126(12):1435-9.
9. Debnath SC, Adhyapok A. Pleomorphic adenoma (benign mixed tumour) of the minor salivary glands of the upper lip. *Journal of maxillofacial and oral surgery*,2010;9(2):205-8.