

# Pleomorphic Adenoma of the Upper Lip - A Case Report

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## Abstract:

Pleomorphic Adenoma is a benign tumor composed of epithelial and myoepithelial cells arranged with various morphological patterns, demarcated from surrounding tissues by fibrous capsule. Tumors uncommonly arise in the salivary glands, and these comprise approximately 1% of all neoplasms in the whole body. It is most commonly found in the parotid or submandibular glands, but may also be found in the minor salivary glands. This article presents a case report of swelling of upper lip in a 29 years old male patient, which histopathologically was diagnosed as pleomorphic adenoma in the upper lip, the second site for frequency for benign tumors of minor salivary glands, after the hard and soft palate.

## Introduction

Salivary gland tumors are uncommon and account for 1% of all head and neck neoplasms<sup>[1]</sup>. These are exocrine organs comprising ducto-acinar units that produce and secrete saliva. They are divided into major salivary glands which consist of three pairs of glands: parotid, submandibular, sublingual and minor salivary glands which are widely distributed throughout the mouth that is palate, upper and lower lip, cheek, gingiva, tongue, floor of mouth, nasal cavity, ear, larynx, pharynx, tonsillar areas, para nasal sinuses, ears, jaw, trachea & bronchi<sup>[2]</sup>.

Pleomorphic adenoma is the most common benign mixed tumour of salivary glands with 90% of cases occurring in major salivary gland and 10% in minor salivary glands. It commonly occurs in parotid or submandibular glands, but may also found in minor salivary glands<sup>[3]</sup>. The hard and soft palates are commonest sites of minor salivary gland tumours. The upper lip is relatively uncommon site and 80% of the minor salivary gland tumours are located in lip are benign. It occurs at any age but commonly occurs in fourth to sixth decade of life with female predilection, and has a natural history of asymptomatic slow growth over a long period<sup>[4]</sup>. This paper describes the case report of an asymptomatic, slowly growing, pleomorphic adenoma in the upper lip of middle aged male.

## Case Report

A 29 year old male patient reported to Department of Oral Medicine & Radiology, Dental college & Hospital Azamgarh with the chief complaint of swelling present on the left side of upper lip region since last four years. Patient experienced more swelling and discomfort on eating, chewing and smiling form last one year.

On extra oral examination, there was a solitary well-defined swelling present on the left side of the upper lip measuring 3 × 3 cm in size, round in shape. The skin over the swelling was normal in appearance [Fig.1].

Intraorally, a solitary well-defined

swelling was present in the upper labial mucosa extending from mesial of 11 to mesial of 22. Frenum was displaced due to swelling [Fig. 2]. Swelling was slightly oval in shape and overlying mucosa was normal in color. On palpation, swelling was soft to cheesy in consistency, freely movable with slippery edges and non-tender to touch. No pulsation and pus discharge was present. The swelling is more likely to be a benign tumor. On the basis of history and clinical features provisional diagnosis pleomorphic adenoma as made. The differential diagnosis of lipoma, mucocele and neurofibroma was made. The patient was subjected for investigations, IOPA was taken which does not reveal any abnormality and any sort of calcification. Patient was subjected for further investigations, routine blood examination and biochemistry, which was under normal limits.

The excisional biopsy was done and specimen of 3 × 3 cm was sent for histopathological examination to nearby

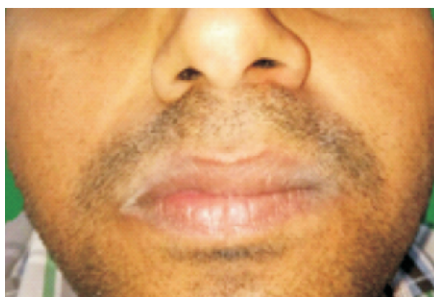


Fig. 1: Solitary well-defined swelling on upper lip.

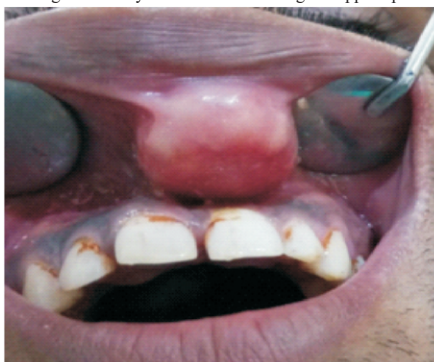


Fig. 2: Intraoral examination showing extent of the painless, non-ulcerative lesion.

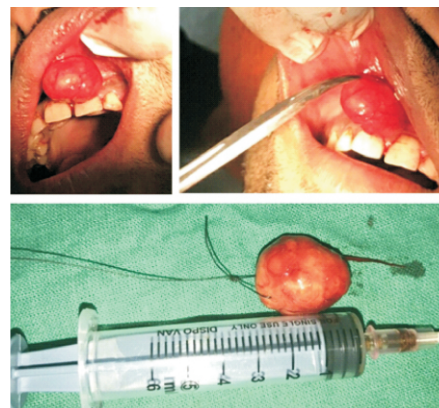


Fig. 3: Intraoperative view of the nodular lesion in the upper lip and the operative specimen.

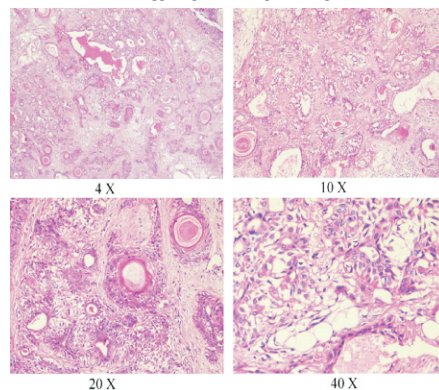


Fig. 4: The histopathological result: showing well encapsulated salivary neoplasm- Pleomorphic adenoma in the upper lip.





Fig. 5: Post operative picture after complete surgical excision of tumor.

pathology center and slide was reviewed again in department of pathology, Institute of Medical Sciences B.H.U [Fig.3]. The given H and E stained histopathological section showed well encapsulated salivary neoplasm comprising of variable portion of glands and squamous elements on a myxoid mesenchymal background. Few of the gland shows eosinophilic hyaline material inside lumen [Fig.4,5]. Correlating history, clinical features and histopathological finding, a final diagnosis of pleomorphic adenoma present in relation to 11,21 and 22 of upper lip was made.

#### Discussion

Pleomorphic adenoma is the most common benign tumour of the minor salivary glands<sup>[3]</sup>. Females are more commonly affected than males, but in present case the patient was male, which is not compatible with literature. It occurs in the 4th and 6th decade of life, which is also not compatible with present case.

A variety of names referred through the years to tumor are - Enclavoma, Branchioma, Endothelioma, Enchondroma. The term Pleomorphic Adenoma suggested by WILLIS. The tumors are said to be Pleomorphic Adenoma because of the epithelial and connective tissue components in varying degrees<sup>[1]</sup>. Pleomorphic adenoma accounts 84% of cases in the parotid, 8% in the sub-mandibular and 4–6% in the minor salivary glands. Minor salivary glands are up to 450 to 1,000 in number and are widely distributed in the head and neck area<sup>[3,5]</sup>.

Most common site for pleomorphic adenoma of minor salivary gland tumour is the palate area following the lip, buccal mucosa, floor of the mouth, tongue tonsil, pharynx and retro molar area but in the present case, it was present in upper lip<sup>[3,5]</sup>. Pleomorphic adenoma of lip accounts 16.9% cases of upper lip and 2.9% in lower lip<sup>[6]</sup>.

The differential diagnosis of upper lip swellings includes a wide range of neoplastic or inflammatory pathological entities: benign and malignant salivary gland tumours, mucocele, salivary duct cyst, nasolabial cyst, minor salivary gland sialolith, mesenchymal tumours, such as hemangioma, neurofibroma, neurilemoma or infection secondary to foreign body's reaction.<sup>[7]</sup> The treatment of pleomorphic adenoma is surgical<sup>[8]</sup>. These tumours are apparently well encapsulated, so resection of the tumour with an adequate margin of grossly normal surrounding tissue is necessary to prevent local recurrence<sup>[9,10,11]</sup>.

#### Conclusion

Pleomorphic adenoma in minor salivary gland of upper lip is very rare. Most of them rarely cause pain, resulting in delay to treatment. The patient concerns may be regarding esthetics or discomfort. As intraoral swellings are usually asymptomatic, it may be discovered on routine oral examination. It is mandatory for a clinician to diagnose intraoral pleomorphic adenoma using latest diagnostic methods and conservatively treat them without causing any discomfort. A complete surgical excision is the treatment of choice. Regular follow up is necessary to check for recurrence and malignant transformation. Nonsurgical treatment method are still under trial which may come into practice in recent future.

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## EVENTS ALERT

### 2018-2019 Events

|   |  |
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| <b>New Delhi<br/>India</b>  | <b>September 15-16, 2018</b><br>Delhi Dental Show  |
| <b>Zirakpur<br/>Chandigarh</b>  | <b>September 15-16, 2018</b><br>Expodent Chandigarh  |
| <b>Chandigarh<br/>India</b>   | <b>October 5-7, 2018</b><br>43 <sup>rd</sup> Indian Society of<br>Periodontology Conference  |
| <b>Bangalore International<br/>Exhibition Centre<br/>Tumkur Road</b>                      | <b>October 6-7, 2018</b><br>Expodent Bangalore   |
| <b>Chennai Trade Centre<br/>Chennai</b>   | <b>October 11-13, 2018</b><br>43 <sup>rd</sup> Annual Congress of Association of<br>Oral & Maxillofacial Surgereon of India                            |
| <b>MMRDA Grounds<br/>Mumbai</b>   | <b>October 12-14, 2018</b><br>World Dental Show  |
| <b>Bombay Exhibition Centre<br/>NSE Exhibition Complex<br/>Goregaon India</b>             | <b>October 20-21, 2018</b><br>Expodent Mumbai  |
| <b>Father Mullers<br/>Convention Centre<br/>Mangalore</b>                                 | <b>November 15-18, 2018</b><br>46 <sup>th</sup> IPS National Conference  |
| <b>A Convention Centre<br/>Vijaywada Andhra<br/>Pradesh</b>                               | <b>November 16-18, 2018</b><br>33 <sup>rd</sup> IACDE National Conference  |
| <b>Udaipur City Palace<br/>Udaipur</b>  | <b>November 23-25, 2018</b><br>30 <sup>th</sup> National Conference of Indian<br>Academy of Oral Medicine & Radiology                                  |
| <b>Oxford Golf Resort<br/>Pune</b>  | <b>November 24-25, 2018</b><br>Maharshtra State Dental Conference  |
| <b>Le Meridien Kochi<br/>Kerala</b>   | <b>December 7-9, 2018</b><br>53 <sup>rd</sup> Indian Orthodontics Conference(IOC)  |
| <b>Pragti Maidan<br/>New Delhi</b>  | <b>December 21-23, 2018</b><br>Expodent International  |
| <b>Colicut Trade Centre<br/>Kozhikod</b>  | <b>January 4-6, 2019</b><br>Kerala State Dental Conference   |
| <b>Indore<br/>India</b>   | <b>January 18-20, 2019</b><br>Indian Dental Conference   |
| <b>Dubai International<br/>Exhibition Centre</b>  | <b>February 5-7, 2019</b><br>AEEDC Dubai   |
| <b>Leela Ambience<br/>Convention Centre<br/>Cologne<br/>Germany<br/>Chennai<br/>India</b> | <b>March 1-3, 2019</b><br>5 <sup>th</sup> Global AAID Conference<br><b>March 12-16,2019</b><br>38 <sup>th</sup> IDS<br><b>2019</b><br>Expodent Chennai |