

Pleomorphic Adenoma of the Upper Lip: A Case Report

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Citation

Shetty N, Kashyap RR, Bhandarkar GP, Shilpa SL, Kini R, et al. (2022) Pleomorphic Adenoma of the Upper Lip: A Case Report. J Dent Res Oral Health 1: 1-5

Publication Dates

Received date: January 09, 2021

Accepted date: February 08, 2022

Published date: February 09, 2022

Abstract

The most common tumor of minor salivary glands is the pleomorphic adenoma and palate is the commonly affected site. Other locations for this tumor within the oral cavity are lips, oral mucosa, and tongue. Clinically shows asymptomatic, slow growing, firm, submucosal nodule. The treatment of choice of pleomorphic adenoma is surgical excision. Malignant transformation, though rare has been reported. In this article, we report a case of pleomorphic adenoma of the upper lip.

Keywords: Pleomorphic Adenoma; Minor Salivary Gland; Palate; Tongue; Upper Lip

Introduction

Salivary gland tumors (SGT) are a rare, heterogeneous group of neoplasms that pose significant diagnostic challenges [1]. Minor salivary gland tumors (MSGTs) are infrequent, accounting for 10-15% of all salivary neoplasms [2]. Pleomorphic adenoma (PA) represents about 45% of all the tumours of the minor salivary glands [3]. The upper lip is most commonly involved than the lower lip with the prevalence of 10.1% [4]. Pleomorphic adenoma (PA) is the most common benign tumor of major salivary gland that exhibits a wide cytomorphologic and architectural diversity. It is also known as “Mixed tumor, salivary gland type”. The annual incidence is approximately 2-3.5 cases per 100,000 populations [5]. It varies in consistency from soft and fluctuant to firm and rubbery, depending on the presence of cystic or mucoid degeneration or the formation of chondroid or osteoid tissues [6]. The diagnosis of PA is established based on the complete history, clinical examination, and histopathological analysis [7]. This present article reports the case of a patient with PA of the upper lip.

Case Report

As a part of routine protocol, the consent has been taken from the patient prior to examination and for publishing the case. A 28 years old male reported to the department of oral medicine and radiology with the complaint of painless swelling in

the upper lip since one and half years, which was gradual in onset, slow growing. The swelling was peanut sized initially which increased to present size, not associated with pain, with no secondary changes present. Patient also complained of discomfort and feeling of heaviness in the area of swelling. His medical history was noncontributory. On extraoral examination no abnormalities detected. On local examination, single diffuse swelling was noted on the left side of the upper lip extending from the inner aspect of labial mucosa up to the labial vestibule which was ovoid in shape measuring approximately 1x1.5 cm, which was sessile with the indistinct edge. The overlying surface is appeared yellowish pink, surrounding mucosal appeared normal (Figure 1). On palpation, the swelling was non-tender, soft, non-fluctuant, fixed to the underlying tissue. Diascopy was negative. Based on the clinical examination, provisionally the case was diagnosed as lipoma of the upper lip on the left side and the differential diagnosis given as minor salivary gland tumor such as pleomorphic adenoma, mucocele, fibroma.

The lesion was excised and histopathological examination revealed numerous cystic spaces lined by acinar cells. The cystic spaces were filled with eosinophilic coagulum. The proliferation of myoepithelial cells and ductal cells was seen. Areas resembling myxoid component and tumor cells were surrounded by encapsulation (Figure 2A and B). Finally diagnosed as pleomorphic adenoma. The patient was recalled periodically for six months and no recurrence was noted (Figure 3).



Figure 1: Pleomorphic adenoma on the upper lip

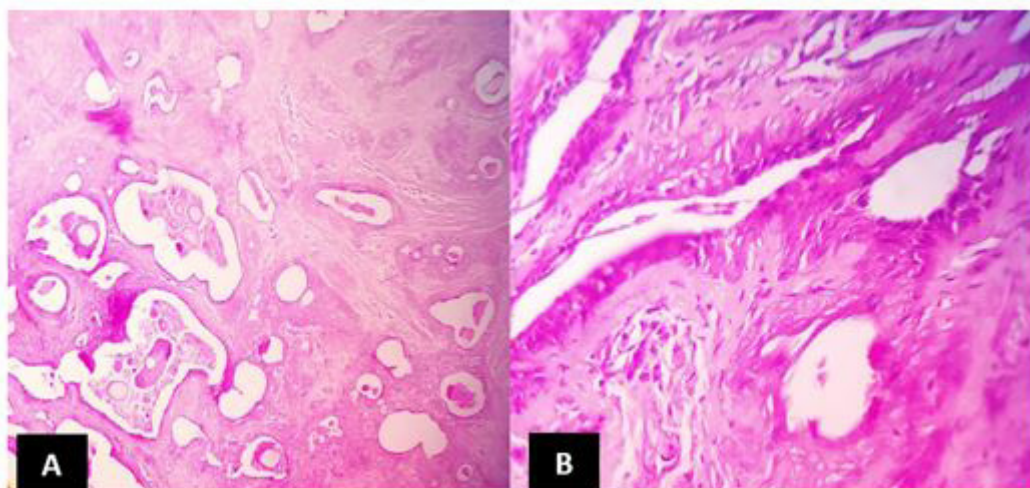


Figure 2: Histology of pleomorphic adenoma



Figure 3: Post-surgical image

Discussion

SGT constitute 2–6.5% of all head and neck tumors [8]. MSGTs account for 10-15% of all salivary neoplasms and are fundamentally located in the palate (50%), lips (15%), buccal mucosa (12%), tongue (5%), and floor of the mouth (5%), among other regions [6]. PA was named by Wills because of the epithelial and connective tissue components in varying degrees [7]. It accounts for 53-77% of parotid tumors, 44-68% of submandibular tumors, and 33-43% of MSGTs [8]. The exact etiology is obscure, the incidence increases with exposure to radiation, association with simian virus 40 (SV 40), use of tobacco, genetic predisposition, exposure to chemicals, and chromosomal aberration of 8q12 and 12q15 [9]. This tumor has also been referred to as Enclavoma, Branchioma, Endothelioma, Enchondromatoma. It is characterized by mixed proliferation of polygonal epithelial and spindle-shaped myoepithelial cells in a variable stroma matrix of mucoïd, myxoid, cartilaginous, or hyaline origin. The tumor

is usually well encapsulated as observed in our case [10]. PA can occur at any age, but most common in young and middle-aged adults, between 30 to 60 years. A slight female predilection is noticed [9]. PA usually appears as an asymptomatic, slow-growing, firm, and submucosal nodule [11]. Differential diagnosis are lipoma, fibroma, cyst and haemangioma [12]. Treatment of PA is complete surgical excision with a surrounding margin of normal tissue. Even though the lesion is benign, there is a recurrence rate of 7-15% with lower risk of malignant transformation to malignant adenoid cystic or mucoepidermoid carcinoma can be seen about 1.5% in first five years and 9.5% after 15 years [7]. Malignant form of PA also known as carcinoma ex pleomorphic adenoma which is defined as carcinoma arising from a primary or recurrent benign PA which is highly aggressive behavior and poor prognosis it accounts less than 7% of all the minor salivary gland tumor [13]. In our case, wide local excision was done with no recurrence has been reported yet.

Conclusion

SGTs are relatively uncommon but their varied clinical presentation, morphologic configuration, and relatively unpredictable prognosis continue to attract significant medical interest. PA of the lip is a rare neoplasm. It should be considered in the differential diagnosis of intraoral swellings of the labial mucosa. Complete wide local surgical excision is the treatment of choice. Despite the low rate of recurrence of this neoplasm, short, medium, and long-term follow-up is recommended.

References

1. Solano N, Lopez J, Castro B, Alvarez B, Linares M (2020) A Rare Pleomorphic Adenoma in an Uncommon Area: A Case Report. *International Journal of Scientific Research in Dental and Medical Sciences* 2: 59-62.
2. Pons-Vicente O, Almendros-Marqués N, Berini-Aytés L, Gay-Escoda C (2008) Minor salivary gland tumors: A clinicopathological study of 18 cases. *Med Oral Pathol Oral Cir Buccal* 13: 582-8.
3. Pramod Krishna B (2013) Pleomorphic Adenoma of Minor Salivary Gland in a 14 year Old Child. *J Maxillofac Oral Surg* 12: 228-31.
4. Kataria SP, Tanwar P, Sethi D, Garg M (2011) Pleomorphic adenoma of the upper lip. *J Cutan Aesthet Surg* 4: 217-9.
5. Alves, Assuncao V, Perez-de-Oliveira, Eduarda M, Castro D (2018) Intraoral Pleomorphic Adenoma in Young Patients. *Journal of Craniofacial Surgery* 29: 209-11.
6. Goyal A, Shukla N, Chauhan P (2019) Pleomorphic adenoma of upper lip - a case report. *International Journal of Research and Review* 6: 16-9.
7. Metgud R, Patel S, Tak A (2016) Pleomorphic adenoma of the upper lip: A case report and review of literature. *Int J Dent Res* 4: 8-10.
8. Pardhe N, Vijay P, Singhal I, Shah G (2015) Pleomorphic Adenoma Of Upper Lip: Case Report. *Int J Oral Care Res* 3: 100-3.
9. Sunil S, Gopakumar D (2013) Pleomorphic adenoma 2013 Case report and literature review [Adenoma pleomorfico 2013 Reporte de caso y revision de la literature]. *Int J Odontostomat* 7: 171-4.
10. Shah BA, Singh AP, Sherwani AY, Ahmad SM (2020) Pleomorphic adenoma of the upper lip: A rare case report. *Natl J Maxillofac Surg* 11: 289-91.
11. Nallasivam KU, Sudha BR (2015) Oral mucocele: Review of literature and a case report. *J Pharm Bioall Sci* 7: 731-3.
12. Bhandarkar GP, Shetty KV (2017) Differential diagnoses of elevated lesions of the upper lip: An overview. *J Can Res Ther* 13: 170-4.
13. Zhao J, Wang J, Yu C (2013) prognostic factors affecting the clinical outcome of carcinoma ex pleomorphic adenoma in the major salivary gland. *World J Surg Onc* 11: 180.