IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 22, Issue 7 Ser.6 (July. 2023), PP 30-33
www.iosrjournals.org

Minor Salivary Gland Neoplasm Of Upper Lip: Atypical Presentation

Dr Sandeep K M[1], Dr Abhishek Pathak[2], Dr Shiny Dominic[3], Dr. Seeja .P[4], Dr Ambili M[5], Dr.Sharath K[6]

Senior lecturer, Department of Oral & Maxillofacial Surgery, Manipal college of dental sciences Mangalore light house hill road 575001 affiliated to Manipal Academy of higher education, Karnataka
Head and Neck oncology fellow, HBNI Muzaffarpur, Bihar, 824001, affiliated to Homi Bhabha National Institute (HBNI)
Associate professor, Department of Oral and maxillofacial surgery, Government dental college Thrissur, Kerala 673001 , Affiliated to Kerala university of health sciences
Asst Professor, Department of Oral and Maxillofacial surgery, Government Dental College, Kozhikode 673008, Kerala , Affiliated to Kerala university of health sciences
Senior lecturer in oral pathology, MES dental college perinthalmanna 679321 , Affiliated to Kerala university of health sciences
Senior lecturer in oral and maxillofacial surgery, mahe institute of dental sciences, MAHE puducherry 673312 affiliated to Pondicherry university.

Abstract
Minor Salivary Gland Pathologies Comprise Of Diverse Group Of Neoplasms With Distinct Histomorphology Variation. Benign Neoplasm Is Commonest Pathology For Major And Minor Salivary Gland, But Neoplasm Of MinorSalivary Gland Is Site Specific In Terms Of Benignity Or Malignant Nature. The Authors Report A Case Of Asymptomatic Swelling In The Upper Lip In 27year Old Man Clinically Diagnosed As Benign Minor Salivary Gland Neoplasm And Histopathological Diagnosed As Pleomorphic Adenoma With Myoepithelial Predominant. This Case Illuminates The Rarity And Variance Of Pathology With Respect To Sex Predilection, Duration, Location And Histopathological Characteristics.

Keywords – *Salivary Gland Neoplasm, Pleomorphic Adenoma, Myoepithelial Cells*

Date of Submission: 06-07-2023 Date of Acceptance: 16-07-2023

I. Introduction

Minor salivary gland neoplasms are uncommon., Pleomorphic adenoma of minor salivary glands mostly occur in posterior palate region (40-60%), and (10%) in lip. Most common site of occurrence are parotid, submandibular and minor salivary glands[1]. It is Benign tripartite salivary gland neoplasm composed of epithelial (ductal) cells, myoepithelial cells and chondromyxoid stroma[2]. However, a relatively high percentage of tumors originating from minor salivary glands are malignant (almost 50%). It is asserted that the smaller the gland, greater the prospect of malignancy for a salivary gland tumor[3].This paper reports diagnosis and surgical management of pleomorphic adenoma with myoepithelial proponents. Myoepithelial cells are ectoderm-derived contractile cells that illustrates both epithelial and smooth muscle characteristics and has secretory functions.

II. Case report

A 27-year-old man reported to government dental college Thrissur with diffused swelling on the left upper lip involving midline

The swelling started 2 years back as small nodule, painless, on lip mucosa close to vestibule, with slow progression, with habit history of smoking and alcoholism in the last 5 years.

On clinical examination

Diffused swelling of size is 40 x 25 x 8 mm extending from upper lip left side to midline involving vestibule inferiorly and approaching the nasal floor superiorly, raising the left upper lip, ulcerated, shiny, stretching the mucosa and nasal blockage of left nasal airway (figure 1).

On palpation, sessile growth was non-tender, non-indurated, firm, rubbery consistency, non-pulsatile, no paresthesia and abutting the nasal floor. Anterior tooth is vital, the lesion has slow progression and was aesthetically unpleasing but asymptomatic otherwise hence clinically diagnosed as benign minor salivary gland

neoplasm.

Neck nodes were negative and Aspiration was negative for fluid or cellular contents

MRI T2 weighed image shows well defined ovoid lesion on upper lip mucosa of size 40 x 30x 15mm arising from soft tissue upper lip not infiltrating the muscle and bone layers. hence provisionally diagnosed as pleomorphic adenoma. (figure 2)

Figure 1 Sessile growth of size 45 x 25 x 8mm

Figure 2 T 2 weighted image shows ovoid shaped neoplasm originating from upper lip

An incisional biopsy was done and histopathology report revealed pleomorphic adenoma with myoepitheliomapredominant.

Vestibular incision ,submucosal dissection done and wide local excision with clear margin of 5 mm, excision of minor salivary glands and orbicularis oris muscle with primary closure was done in layers.

Figure 3 lesion excised in toto with muscle layer

On gross examination, the excised tumor had a smooth surface and was well-circumscribed and

encapsulated(figure3).The cut surface of the tumor appeared solid, homogeneous, and white in color.

Histological section revealed well circumscribed tumor mass, encapsulated at areas and separated from overlying hyperplastic stratified squamous epithelium by band of fibrovascular connective tissue. The tumor mass shows sheets and strands of spindle shaped cells in fibrous stroma.

Focal areas of epithelioid cells and cells showing clearing of cytoplasm are also seen (Fig 5). Peripheral areas of section show normal minor salivary gland acini and ductal components in the inner layer of cyst and tubules suggestive of pleomorphic adenoma with myo epithelioma predominant. (Figure 4)

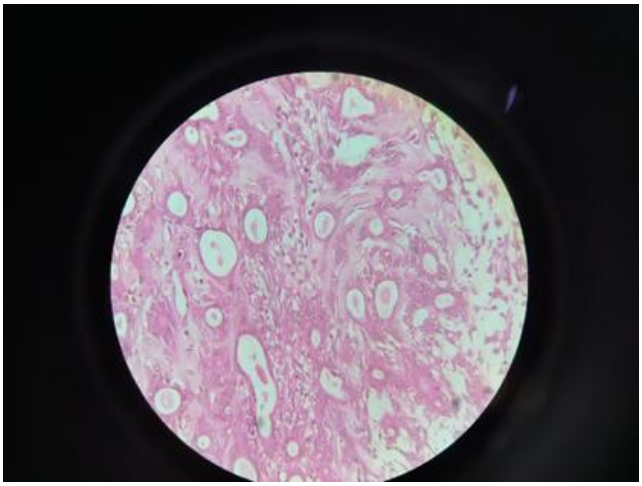

figure 4 shows ductal and tubular components in encapsulated mass

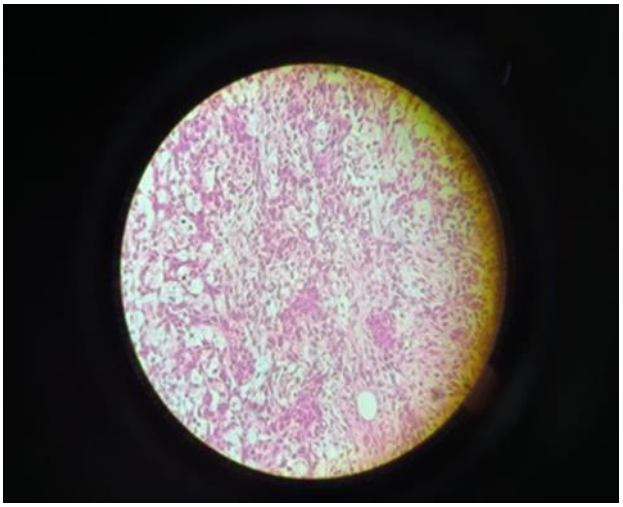

Figure 5 40X view shows intermingling of clear cells and epithelioid cells

III. Discussion

Differential diagnoses of solid, sessile asymptomatic growth of oral cavity are minor salivary gland tumors like monomorphic, canalicular adenoma, Warthin's tumor, leiomyoma and plasmacytoma. For lesions involving the buccal mucosa, cheek, lip and tongue, lipoma, neurofibroma and other benign mesenchymal tumors and malignant tumors like adenoid cystic or mucoepidermoid carcinoma is to be considered. Slow rate of growth of lesion, location, mobility, demarcation no bony, nodal involvement and no change in sensation are likelihood of benign nature, but ulceration is considered as indicator of malignancy[9].Hence incisional biopsy was performed.

This case of pleomorphic adenoma with predominant myoepithelial cells of minor salivary glands culminates to a potential diagnostic conundrum. Combination of ductal pleomorphic adenoma, myoepithelial cells and encapsulation are identified (fig 5). Many pleomorphic adenomas have numerous myoepithelial cells. A criterion that is be used to distinguish these two lesions is that if tumor contains less than a 5% ductal components and glands it should be called myoepithelioma. Since the specimen revealed ductal components, it is diagnosed as pleomorphic adenoma with myoepithelial predominant (fig 5). Recent studies reveal myoepithelial cells exhibit tumor suppressor and anti-invasive activity by enhancing epithelial differentiationand basement membrane synthesis and inhibit angiogenesis[7,8].

Incidence of pleomorphic adenoma only 6.4% in minor salivary glands. Of upper lip is (10%)[6] of all minor salivary gland neoplasm and age limit (30-40 years) with female predilection (2:1 ratio)[5]. The age, sex of the patient and the site and histological variance of neoplasm illuminate's distinctiveness of this case report. wide surgical excision with 5mm clear margin is the preferred course of treatment. Recurrence after surgical excisiondue to tumor spillage and incomplete removal as well as malignant transformation (1.5%)[10,] should be anticipated hence, long-term follow-up is mandatory. No recurrence were noted on follow up for 30 months.

Conflict of interest- none
Funding – none
Authors contribution- all the authors have significantly contributed for the publication of the article
Informed consent- patient has been informed that his data will be utilized for publication purposes

References

[1]. Kaur, Sukhjot, Gurvinder P. Thami, And Nitin M. Nagarkar. "Pleomorphic Adenoma Of The Hard Palate." Indian Journal Of Dermatology, Venereology And Leprology 69 (2003): 74.
[2]. Dalati, Taufik, And Mahmoud R. Hussein. "Juvenile Pleomorphic Adenoma Of The Cheek: A Case Report And Review Of Literature." Diagnostic Pathology 4, No. 1 (2009): 1-5.
[3]. Neville, Brad W., D. D. Damm, Carl M. Allen, And J. E. Bouquot. "Odontogenic Cysts And Tumors." Oral And Maxillofacial Pathology 3 (2002): 678-740.
[4]. Allon, Irit, Dror M. Allon, Yakir Anavi, And Ilana Kaplan. "The Significance Of Surface Ulceration As A Sign Of Malignancy In Exophytic Oral Mucosal Lesions: Myth Or Fact?." Head And Neck Pathology 7, No. 2 (2013): 149-154
[5]. Ellis, G. L. "Surgical Pathology Of Salivary Glands. 1 [Sup] St Ed., Vol. 25." (1991).
[6]. Batsakis, John G., Beverly Kraemer, And James J. Sciubba. "The Pathology Of Head And Neck Tumors: The Myoepithelial Cell And Its Participation In Salivary Gland Neoplasia, Part 17." Head & Neck Surgery 5, No. 3 (1983): 222-233.
[7]. Debnath, Subhas Chandra, And A. K. Adhyapok. "Pleomorphic Adenoma (Benign Mixed Tumour) Of The Minor Salivary Glands Of The Upper Lip." Journal Of Maxillofacial And Oral Surgery 9, No. 2 (2010): 205-208.
[8]. Thomas, Deena C., Vivek V. Nair, And Sunila Thomas. "Pleomorphic Adenoma: An Unusual Presentation On Upper Lip-A Case Report." Journal Of Indian Academy Of Oral Medicine And Radiology 29, No. 3 (2017): 217.
[9]. O'Regan, Barry, And Girish Bharadwaj. "Tumour Recurrence After Surgical Removal Of Parotid Pleomorphic Salivary Adenoma Using A Retrograde Facial Nerve Dissection Technique." British Journal Of Oral And Maxillofacial Surgery 50, No. 5 (2012): 417-419.
[10]. Jorge, J., F. R. Pires, F. A. Alves, D. E. C. Perez, L. P. Kowalski, M. A. Lopes, And O. P. Almeida. "Juvenile Intraoral Pleomorphic Adenoma: Report Of Five Cases And Review Of The Literature." International Journal Of Oral And Maxillofacial Surgery 31, No. 3 (2002): 273-275.