



Pleomorphic Adenoma of the Soft Palate Mimicking an Oral Cancer: Case Report with 5 Years of Follow-Up

Thais Duarte de Castro¹, Kemerson Janey Guedes Batista¹, Daniel Nuciatelli Pinto de Mello², Estevam Rubens Utumi³, Diego Armando Boff Gomes³, Caleb Shitsuka⁴ and Irineu Gregnanin Pedron^{5*}

¹Undergraduate Student, Universidade Brasil, São Paulo, Brazil

²DDS, Birmingham, UK

³Preceptor and Oral and Maxillofacial Surgeon, Hospital Municipal Dr. Arthur Ribeiro de Saboya, São Paulo, Brazil

⁴Professor, Department of Pediatric Dentistry and Cariology, School of Dentistry, Universidade Brasil and Faculdades Metropolitanas Unidas, São Paulo, Brazil

⁵Professor, Department of Periodontology, Implantology, Stomatology, Integrated Clinic and Therapeutics, School of Dentistry, Universidade Brasil, São Paulo, Brazil

***Corresponding Author:** Irineu Gregnanin Pedron, Professor, Department of Periodontology, Implantology, Stomatology, Integrated Clinic and Therapeutics, School of Dentistry, Universidade Brasil, São Paulo, Brazil.

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Abstract

Pleomorphic adenoma is a salivary gland neoplasm frequently observed in the dental clinic. It is more common in young adults, although usually diagnosed between the 3rd and 5th decades of life. One of the main characteristics is the diversity of the histopathological and morphological pattern. Clinically, it is characterized as a firm, slowly growing, painless mass. However, in some cases, it may simulate other lesions, including oral cancer. The purpose of this article is to report a case of pleomorphic adenoma on the palatal mucosa of a 55-years-old patient, mimicking an oral cancer. The excisional biopsy was performed and the lesion was diagnosed as pleomorphic adenoma. The patient has been followed by 5 years, with no signs of recurrence.

Keywords: Pleomorphic Adenoma; Salivary Gland Neoplasms; Minor Salivary Glands; Oral Surgery; Oral Diagnosis

Introduction

Pleomorphic adenoma, also known as mixed benign tumor, is the benign salivary gland neoplasm most often seen in dental practice, ranging from 40% to 70%. It usually affects the minor salivary glands, followed by the major glands (submandibular and parotid). In the oral cavity, the palate is the most commonly affected site, followed by the jugal mucosa, upper lip, tongue, floor of the mouth, retromolar region, and tonsils [1-9].

Clinically, the lesion is characterized by a firm, fibroelastic tumor mass; slow growth; asymptomatic if it presents normal mucosa or symptomatic if it is ulcerated; of varying size between 10 and 20 mm in diameter. Depending on its location, it can hinder

normal physiological activities such as chewing, swallowing, and phonation [1,4-6]. The lesion can reach larger proportions if it is neglected [1,2].

Pleomorphic adenoma usually affects young adults, but can reach patients in the 6th decade of life. It is more prevalent in females [1-3].

Among the histopathological features, pleomorphic adenoma can present with epithelial, myoepithelial, ductal and stromal cells, myxoid, fibrous, cartilaginous and bony areas mixed with mesenchyme [1-3,5,7,10]. Possible malignant transformation resulting in carcinoma ex pleomorphic adenoma is cited, occurring in 3 to 6% of cases [5,11,12].

The recommended treatment is surgical excision with the covering mucosa in order to prevent recurrence. The recurrence rate ranges from 2 to 22%, due to incomplete or partial removal [3,12,13]. The purpose of this article is to report a case of pleomorphic adenoma on the palatal mucosa of a 55-years-old patient, mimicking an oral cancer.

Case Report

A Caucasian male patient, 55-years-old, presented to the clinic complaining of a lesion on the palate.

Clinically, a tumoral mass was observed on the right palatal mucosa, in the region of tooth 17, at the transition between the hard and soft palate. The lesion was symptomatic; erythematous coloration; the surface was ulcerated, with depression in the center and raised edges; fibroelastic consistency; the base was sessile; it was approximately 15mm in diameter; with evolution time of 18 months (Figure 1).



Figure 1: Lesion on the right palatal mucosa, in the periapical region of tooth 17.

The computed tomography showed a discrete hypodense image on the right palate, compatible with the lesion (Figure 2).

Given the clinical and radiographic features, the diagnostic hypothesis of epidermoid carcinoma was established. Excisional biopsy was recommended.



Figure 2: Discrete hypodense image on the right palate, compatible with the lesion.

Under local infiltrative anesthesia, the lesion was completely removed with a safety margin. Resorbable suture thread (Vicryl 4-0™, Ethicon, Raritan, NJ, US) was used, approximating the edges of the surgical wound, with the purpose of containing bleeding and favoring tissue healing. The patient was prescribed analgesic, anti-inflammatory and antibiotic drugs.

The removed fragment (Figure 3) was fixed in 10% formalin and sent to the Laboratory of Surgical Pathology of the Department of Oral Pathology of the School of Dentistry, University of São Paulo. The histopathological examination revealed a mixture of glandular, myoepithelial, epithelial and mesenchymal stromal components. The epithelial component showed areas of squamous metaplasia. Next to the myoepithelial component hyalinization of the stroma was noted. No signs of malignancy such as foci of capsular, vascular or perineural invasion were observed (Figure 4). The final diagnosis was pleomorphic adenoma.

After 10 days (Figure 5), the remaining sutures were removed. No complaints or complications were reported.

After 2 months, a clinical evaluation was performed. Complete healing of the surgical wound was observed (Figure 6). The patient has been followed up for 5 years with no signs of recurrence.

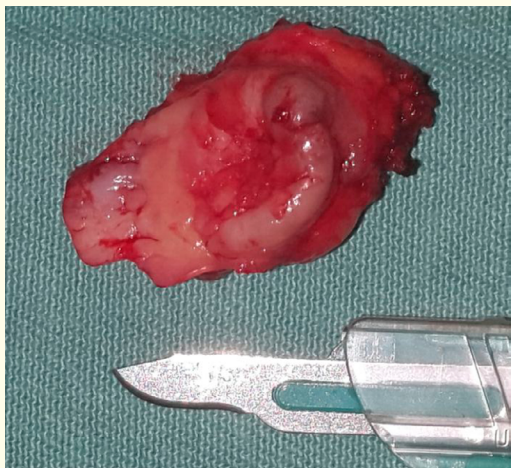


Figure 3: Lesion completely removed.



Figure 6: Clinical evaluation (after 2 months): Complete healing of the surgical wound.

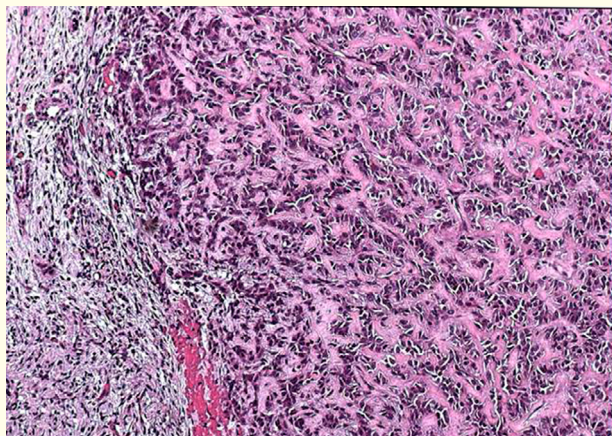


Figure 4: Histopathological aspects of the pleomorphic adenoma (magnification: 40X).

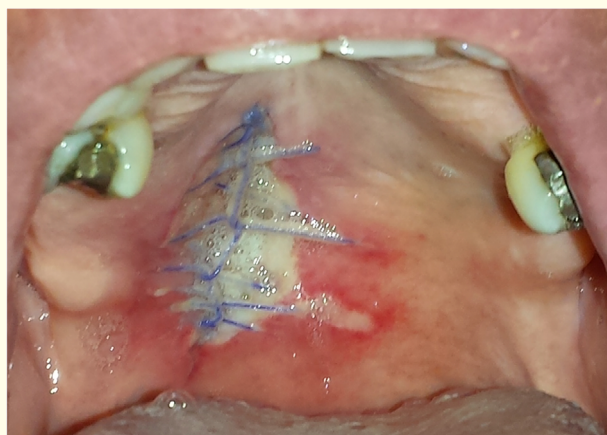


Figure 5: Post-surgical evaluation (10 days): Partial healing.

Discussion

In major salivary glands, pleomorphic adenoma accounts for approximately 70% of all benign tumors [4,8,13]. The parotid glands are the most affected (75% to 85%), followed by the submandibular glands (5% to 10%) and the minor salivary glands (10%) [14]. This report presents a lesion in the transition palatal mucosa between the hard and soft palates as the most prevalent region of pleomorphic adenoma in the oral cavity [1]. In the oral cavity it can reach large proportions, causing difficulties in chewing, swallowing, speaking and breathing [6-8]. In the present case, the lesion was not large, but caused mild discomfort when swallowing.

Pleomorphic adenoma affects patients at any age, although more prevalent in adults between the 4th and 6th decades of life, rarely observed in children [1,3,10].

Complementary exams, such as previous incisional biopsy or fine needle aspiration puncture, are the exams performed to define the diagnosis, which is elucidated by histopathological evaluation [1,3,5,9]. In the present case, the presumptive clinical and radiographic diagnosis of this case was oral cancer, but determined by the histopathological examination.

The differential diagnosis of lesions on the palate includes malignant neoplasms of minor salivary glands, such as low-grade polymorphous adenocarcinoma, mucoepidermoid carcinoma,

and adenoid cystic carcinoma. Other lesions manifested as palatal volumetric enlargement of mesenchymal origin, such as neurofibroma and rhabdomyosarcoma, may also make up the differential diagnosis of pleomorphic adenoma [10].

Excision of the lesion is the recommended treatment, removing the covering mucosa, aiming to prevent recurrence of the lesion [1,2,4,9,12]. In the present case, the lesion was completely removed by excisional biopsy.

Post-surgical clinical and radiographic follow-up should be performed in the long term [1,2], since there is a possibility of recurrence or malignant transformation (3% to 6% of cases), resulting in carcinoma ex pleomorphic adenoma [5,11,12,16].

Conclusion

The pleomorphic adenoma presents varied clinical morphology, leading the dental surgeon to misdiagnosis. The elucidation of the diagnosis can only be reached by histopathological examination, determining the need for biopsy. When possible, incisional biopsy should be performed previously. Otherwise, as presented here, the excisional biopsy concludes the diagnosis. Postoperative clinical and radiographic follow-up should be performed because of the possibility of recurrence of the lesion.

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