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### CASE REPORT



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## CLINICAL-SURGICAL MANAGEMENT FOR LIPOMA REMOVAL IN BUCCAL SPACE - CLINICAL CASE REPORT

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#### Abstract

Lipoma is the most common benign mesenchymal tumor of soft tissues in humans. It occurs mainly in the trunk, in the extremities of the body and in the neck region, but only 0.1 to 5% are in the oral region. Clinically, the lesion located in the oral cavity is well-defined, asymptomatic, and the color varies according to its distribution in the oral tissues. They may be sessile or pediculated, with a smooth surface, gelatinous appearance, and may vary in size. The treatment commonly indicated consists of total excision of the lesion, which is an essential factor for the success of the treatment. The objective of this study is to report and discuss a case of lipoma located in the oral space, treated surgically with intraoral access under local anesthesia and in an outpatient setting.

Keywords: Lipoma, Neoplasms, Oral Pathology

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#### 1 | INTRODUCTION

ipomas are benign soft tissue tumors, originating from the mesenchyme and are consisting of mature adipocytes. Although it is the most common type of mesenchymal neoplasia, only about 20% of these tumors affect the head and neck and of these, only 0.1 to 5% are in the oral cavity (1) , (2), (3).

Regarding their etiology and pathogenesis, although uncertain, they seem to be associated with inflammatory, endocrine, trauma and genetic factors, affecting more commonly female patients, when related to the oral cavity, between the 5th and 7th decade of life (2)

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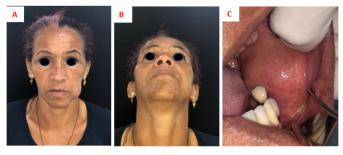
, (3), (4). The lipoma metabolism is independent of body fat, that is, even if there is a body reduction in the individual with fat loss, the tumor will not decrease in size (5).

When they affect the oral cavity, in most cases, they appear in the region of the jugal mucosa, followed by the lip, retromolar region and tongue (2), (3)Lipomas can present as painless nodular masses, usually yellowish, which may be sessile or pediculated, with a flat surface, gelatinous appearance and well circumscribed (1). Locations are slow-growing lesions and can therefore be diagnosed after months or years of disease onset (3), (4).

The diagnosis can be confirmed by means of histopathological analysis, after excisional biopsy of the lesion. An important factor for differential diagnosis with other neoplasms is related to the fact that the surgical specimen floats under a 10% formaldehyde solution, due to the high concentration of fat (1).

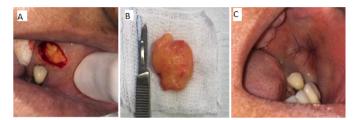
Therefore, the aim of this study is to report and discuss a clinical case of lipoma in the oral space, which was conducted in an outpatient setting under local anesthesia.

#### 2 | CASE REPORT



**FIGURE 1:** Preoperativeevaluation. A) and B) Increase in volume in the left mandibular region, causingfacial asymmetry; C) Traction of the cheek mucosa, showing an increase inyellowish volume.

Excisional biopsy of the lesion was instituted as treatment. After asepsis and antisepsis with chlorhexidine, the patient was anesthetized with 2% lidocaine and epinephrine 1: 200,000. Initially, aspiration puncture was performed, with a negative result for liquid content. Thus, an incision was made in the left cheek mucosa, followed by divulsion to expose the lesion. After excision of the tumor, copious irrigation with 0.9% saline solution was performed. The sutures were performed with 4-0 nylon thread (Figure 2). As postoperative guidelines, the patient used thermotherapy and a soft diet for the first three days. The use of ibuprofen 600 mg every 8 hours for 3 days was used as a postoperative medication protocol, sodium dipyrone 01g every 6 hours for 02 days and mouthwash with 0.12% chlorhexidine digluconate every 12 hours during 07 days.



**FIGURE 2:** Transoperative images. A) Exposure of the lesion after the incision and divulsion of the cheek mucosa; B) Surgical specimen after excisional biopsy C) Sutures with 4-0 nylon, in position, in the access region

The surgical specimen was stored in a solution with 10% formaldehyde, demonstrating the ability of the lesion to float, corroborating the clinical suspicion (Figure 3). The material removed was sent to the Surgical Pathology Laboratory of the Faculty of Dentistry of the Federal University of Bahia for histopathological analysis. The anatomopathological report concluded that the tumor was a lipoma.

#### 3 | DISCUSSION

Lipomas are benign neoplasms, originating from adipose tissue and are commonly found on the trunk, extremities of the human body and neck (2), (6) ]. It differs, therefore, from the location of the present study in the oral cavity. Regarding the prevalence of involvement in the oral region, Osterne et al. (3), in their study in 2019 demonstrates that they appear primarily in the region of the jugal mucosa, followed by the lip, retromolar region and tongue. However, Resende et al. (2013) (7), Valencia et al. (2017) (8)

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**FIGURE 3:** Surgical specimen stored in a 10% formaldehydesolution.



**FIGURE 4:** *Immediatepostoperative evaluation: Preserved and contoured facial contours bilaterally.* 

and Costa et al. (2017) (9) concluded that the places most affected in the oral region are jugal mucosa, followed by tongue, buccal groove, oral floor and lip. Despite the discrepancy in results, the literature agrees, however, that the place most affected is the jugal mucosa. This fact also corroborates with the present case reported. The predilection for this site is probably related to the availability of adipose tissue, which is high in the oral space, due to the presence of the cheek adipose body (10).

Although its etiopathogenesis remains uncertain, trauma and chronic irritation seem to play an important role in the development of a lipoma (8), compatible with the history reported by the patient

in the present study. They are usually slow-growing lesions and can therefore be diagnosed months or years after the onset of the disease. Therefore, patients with treatment only seek treatment when they have phonetic, masticatory or aesthetic disorders (3), (7), (7).

Due to the location and clinical aspects of the lesion, it was possible to assess and suspect its diagnosis through clinical examination, eliminating the need for complementary tests in this case. However, if the clinical examination is not enough to identify the limits of the pathology, it is prudent to request imaging tests, such as ultrasound, computed tomography or magnetic resonance, as complementary tests (8), (11) In tomographic exams, a hypodense radiolucent mass is observed, circumscribed by a thin radiopaque capsule, which do not stand out with contrast (11). Even with these characteristics, the final diagnosis can only be obtained through histopathological examination (1), (8), (11).

Lipomas can present as painless nodular masses, usually yellowish, which may be sessile or pediculated, with a flat surface, gelatinous appearance and well circumscribed (1), (2), (7). According to cytological aspects, lipomas can be described as: simple lipomas and their variants: fibrolipoma and angiolipoma as the most common found in the oral cavity; chondrolipoma, osteolipoma, intermuscular and intramuscular lipomas, myelolipoma, mixolipoma, benign lipoblastoma, spindle cell lipoma and sialolipoma (1), (3) , (4) ]. However, the most indicated treatment consists of total excision of the lesion, regardless of its histological variation (9).

In general, surgical removal of the lesion can be performed in an outpatient setting or in an operating room, depending on the systemic conditions and collaboration of the patient, size, location and depth of the lesion. Rarely, lipomas are larger than 5 cm in diameter, the majority being in the orofacial region of up to 2 cm (8), (12). The case presented, therefore, differs from those presented in the literature, because it is a tumor in the 3.5 cm oral region and, because it manifests superficially, safely allowing its total removal under local anesthesia, in an outpatient setting.

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After the lipomas are excised, if well performed, it presents with a good prognosis and without relevant incidences of malignant transformation (4), (8), (9). Despite the low probability of recurrence, especially in the facial region, recurrence rates are higher in intramuscular lipomas, due to the infiltrative growth pattern (12), (13) and, therefore, postoperative follow-up is important. So far, the patient is in the sixth month of postoperative follow-up, with no signs of recurrence.

### 4 | FINAL CONSIDERATIONS

Although lipoma is the most common mesenchymal neoplasm in humans, only 15% to 20% occurs in the head and neck and when associated with the oral cavity, it most commonly affects the jugal mucosa. They are characterized by benign lesions, slow growth, well defined and with low rates of recurrence, therefore, they present with a favorable prognosis. Despite this, its growth in the oral region directly interferes with the functions of the stomatognathic system, such as phonation, chewing and adaptation of removable prostheses. Even with histological variations, the most appropriate treatment consists of total excision of the lesion, which is an essential factor for the success of the treatment.

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