

Jugal Lipoma: A Rare Case and Review of the Literature

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Abstract

Case Report

Presentation of a documented case of a lipoma of the jugal region and data from the literature on this subject. This is a 55-year-old patient with a 10-month history of swelling in the right jugal region that was found to be a lipoma on pathological examination after surgical excision. Although lipoma is the most common benign soft tissue tumor, jugal localizations are rare. We report a new case to the scientific community to document this rarity.

Keywords: Jugal lipoma, benign tumor, ultrasound, histology, vestibular approach.

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INTRODUCTION

Lipoma is a benign tumor consisting of a localized proliferation of fat cells. It is one of the most frequent benign mesenchymal neoplasms, of slow evolution and of fortuitous discovery [1].

However, intra-mental lipoma is a rare tumor, which has been reported in few cases in the medical literature. An additional case is reported in this article: a 55-year-old man who was admitted to our department because of a jugal swelling diagnosed by soft tissue ultrasound and treated by surgical excision. In addition, a review of the literature on this subject is presented.

CASE REPORT

A 57-year-old patient consulted for a large swelling on the outer surface of his right cheek evolving for 10 months. He had a history of hypertension and type 2 diabetes.

Extraoral examination revealed a single tumor measuring three centimeters in length, mobile, soft and painless to palpation, well limited, asymptomatic, no

inflammatory sign opposite, no thrill (Fig 1). Intraoral examination revealed no particular abnormality except for a slight swelling on palpation (Fig 2).

A soft tissue ultrasound was recommended and showed a mass in the right jugal region corresponding to a formation developed in the retrozygomato-maxillary space, oval in shape, measuring 23x27 mm, with a well-defined contour and fibrillar echostructure, not vascularized on the Doppler ultrasound: in favor of a lipoma (Fig 3).

A complete surgical resection was realized under local anesthesia. The chosen approach was the vestibular approach in the jugal mucosa by horizontal incision in the center of the lesion. During anatomopathological sampling, the presence of yellowish encapsulated multi-nodular masses was observed (Fig 4 & 5).

The histological analysis of the surgical specimen concluded to a lipoma without cellular atypia and without sign of malignancy. Postoperative control at two weeks showed good healing of the oral mucosa.



Figure 1: Clinical aspect of the right jugal tumor



Figure 2: Intraoral view, showing a slight swelling in the jugal mucosa

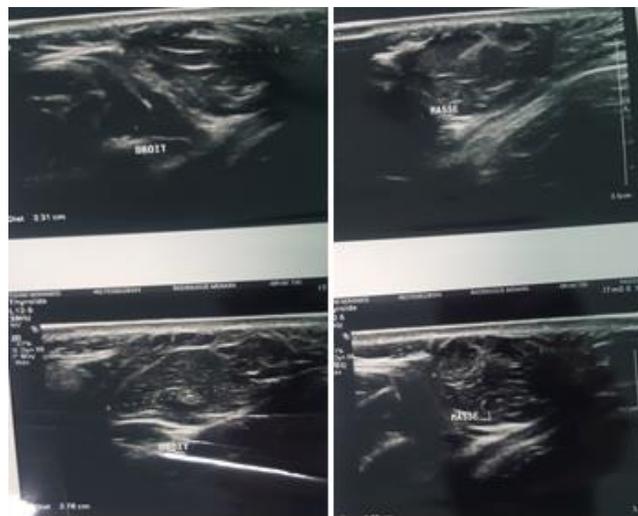


Figure 3: Appearance of the lipoma on ultrasound

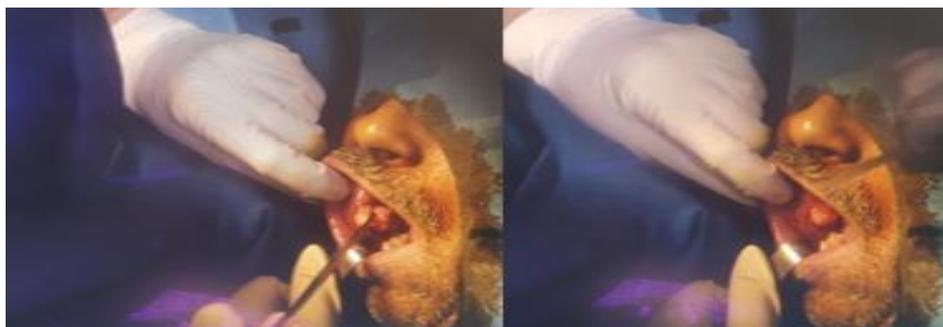


Figure 4: Surgical excision and exposure of the lesion



Figure 5: Appearance of the mucosa after complete removal of the lipoma

DISCUSSION

Lipoma is considered a benign mesenchymal neoplasm formed by mature fat cells with varying amounts of collagen bundles and blood vessels, most frequently affects the thorax, back and shoulders, while only 5% of tumors in the oral cavity [2]. In the intraoral region, it mainly occupies the jugal mucosa, lips, tongue and floor of the mouth [3].

According to the latest WHO classification, lipomas most commonly affect patients between the ages of 40 and 60 years. According to the same classification, localization in the intraoral region is found in a small number of cases in the literature [4]. The studies show a slight discrepancy with men, who are more affected [5].

Its pathogenesis remains relatively unknown, and its development is independent of lipid metabolism and diet [6]. For our patient no etiology was suspected (no history of trauma, infection, heredity...)

Clinically it takes the form of a yellowish colored tumor of soft consistency, which can have different dimensions. When it is intraoral, it causes a lot of discomfort to the patient, in addition to aesthetic and phonetic problems, depending on the affected area. In our patient, only the aesthetic problem was present since the lipoma was developed mainly towards the outside and did not interfere with the oral cavity.

The diagnosis is not always easy. In cases where the overlying mucosa is thin and the yellow color of the tumor can show through it, the diagnosis of lipoma is easily made. On the contrary, in cases of deep lipomas, the diagnosis is not easy. In this case, the tumor may be diagnosed as a cyst, an encapsulated abscess or another type of tumor. In this patient, the diagnosis of lipoma was not made in the first place, but the ultrasound guided the diagnosis.

Medical ultrasound is useful for the characterization and follow-up of a typical superficial lipoma [1]. Easily available and inexpensive, ultrasound will be the first-line examination in our context. CT, allows to determine the infiltrative nature of the lesion in the bone tissue, which can provide information on the malignancy or not of the lesion.

Histologically, lipomas can be classified into simple lipomas or variants, such as fibrolipomas, spindle cell lipomas, intramuscular or infiltrating lipomas, angioliomas, salivary gland lipomas, pleomorphic lipomas, myxoid lipomas, and atypical lipomas. Fibrolipoma is the second most common form after simple lipoma, and is characterized by more abundant and thicker fibrous trabeculae [7].

The treatment of choice is complete surgical resection with systematic histologic analysis. The prognosis is favorable and relapse is rarely observed. The tumor was treated surgically in our clinical case. Postoperative follow-up revealed local healing without recurrence.

Medical treatment can be considered, consisting of corticosteroid injections to achieve atrophy of the lesion. Low-intensity laser therapy in multiples sessions has been used for a palatal lipoma to improve postoperative healing and patient comfort. In superficial locations, the lipoma with fibrous septa makes it a well-limited and easily accessible lesion. However, in the presence of contact with the salivary glands, facial nerve, and floor of the mouth, as well as a deeper anatomic location, the clinician must reevaluate the benefit-risk balance and surgical indication.

CONCLUSION

Lipomas are benign tumors, rare in the mouth. As there are other lesions that can be confused with lipoma, it is important to make a correct diagnosis that allows for proper treatment. The treatment, in most

cases, is simple and consists of surgical removal of the lesion, the prognosis is good.

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