

Intraoral Lipoma: A Rare Placement in Mental Foramen Area

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ABSTRACT

Lipomas are the most common benign soft tissue tumors. They are usually surrounded by a thin fibrous capsule and composed of mature fat cells. Approximately 15 to 20% of cases occur in the head and neck region and only 1 to 4% occur in the oral cavity. The most common anatomic site in the oral cavity has frequently been reported as the buccal mucosa, followed by floor of the mouth, tongue and lower lip mucosa. They present as painless, well circumscribed, soft or firm, slow growing submucosal mass. Heredity, fatty tissue degeneration, hormonal imbalance, trauma, infection and chronic irritation have been proposed as etiological agents for lipomas; their etiology remains unknown.

Keywords: Lipoma, Mental nerve, Tumor

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INTRODUCTION

Lipomas are common tumors in the human body, but are less frequent in the oral cavity, comprising no more than 1 to 5% of all neoplasms.¹ They commonly present as slow growing asymptomatic lesions with a characteristic yellowish color and soft, doughy feel in the buccal mucosa, floor of the mouth and tongue, in the fourth and fifth decades and generally with no gender predilection.² The pathogenesis of lipoma is uncertain, but they appear to be more common in obese people.³ However, the metabolism of lipoma is completely independent of the normal body fat. If the caloric intake is reduced, lipomas do not decrease in size, although normal body fat may be lost. They are benign mesenchymal neoplasms composed of fat cells usually surrounded by a thin fibrous capsule. The size of tumor depends on the location but rarely exceeds 25 mm in diameter. Lipomas are usually asymptomatic until they grow to large size and may interfere with speaking and mastication.⁴

CASE REPORT

A female patient, aged 67 years, was referred to our department of oral and maxillofacial surgery clinic with 2 years history of a swelling in the left mandibular premolar region. A large intraoral smooth well-defined sessile nodule

of similar color to the surrounding mucosa was observed in the mucosa, a little above the alveolar ridge and the mental foramen, surface of the growth was of a faint yellow color. In palpation, the growth was nontender and firm in consistency. It measured 4 × 2 cm in size, with no visible fluctuations of pseudomembranous slough appearing on its periphery (Fig. 1). Extraoral examination revealed no specific abnormality. Radiography revealed no bone involvement.

Surgical excision is the current treatment for oral lipomas. The surgical approach is dependent on the site of the tumor and the desired cosmetic result. In this case, lipoma was very close to the mental nerve, so nerve dissection was performed intraorally under local anesthesia for avoiding any nerve damage (Figs 2A and B).

Microscopic examination of the excised soft tissue mass revealed sheets of mature adipocytes containing large clear cytoplasm and eccentric nuclei with inconspicuous vascularity and no evidence of cellular atypia or metaplasia. These features are consistent with a classical diagnosis of a lipoma.

DISCUSSION

Lipomas are the most common mesenchymal tumors especially in trunk and proximal portions of the extremities but they are rare tumors of oral cavity.⁵ Lipomas of the mouth are benign tumors; they grow slowly, do not infiltrate other tissues, do not ulcerate and are painless. They are

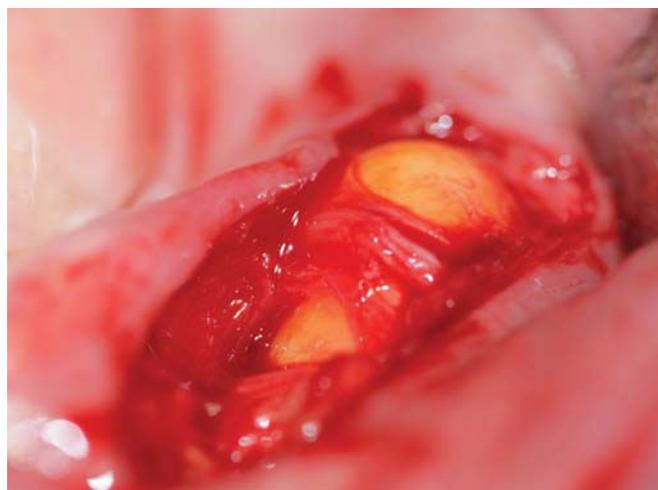
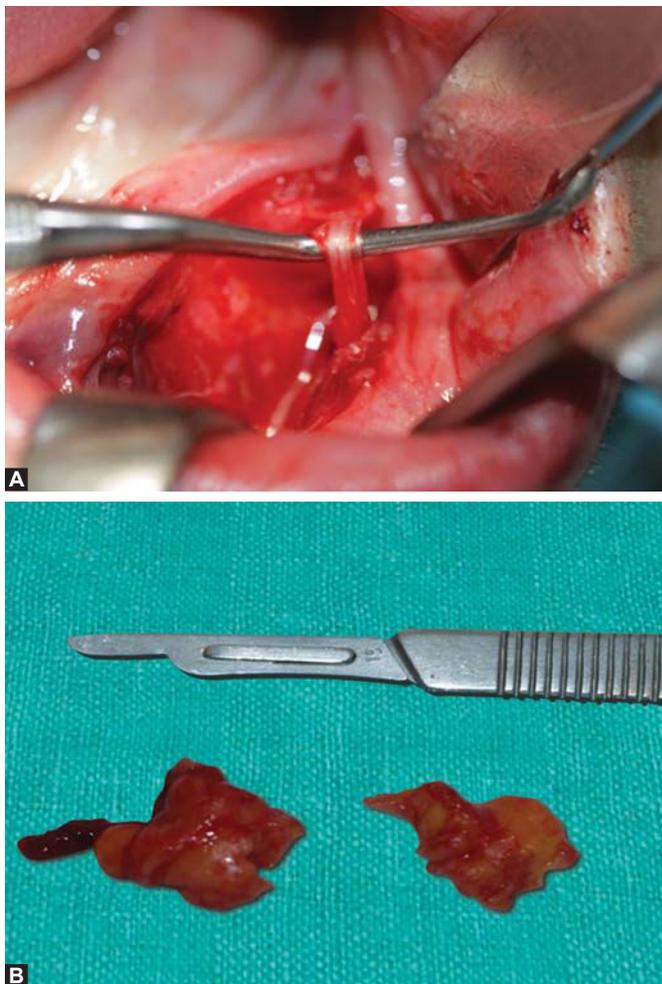


Fig. 1: Intraoperative view of the lipoma



Figs 2A and B: Relationship between mental nerve and lipoma

relatively rare in the mouth and the maxillofacial region. Generally, their prevalence does not differ with gender, although a predilection for men has been reported and they occur most often in patients older than 40 years.⁶ The cheek is the commonest site of occurrence in the intraoral cavity followed by tongue, floor of the mouth, buccal sulcus and vestibule, palate, lip and gingiva. This pattern corresponds closely to the quantity of fat deposit in the oral cavity.⁷

No consensus exists regarding the pathogenesis of oral lipomas. Today, heredity, fatty degeneration, hormonal basis, trauma, infection, infarction, metaphase of muscle cells, lipoblastic embryonic cell nest in origin and chronic irritation are probable representative theories to elucidate the pattern of a lipoma.⁸ In the present case, patient had no systemic diseases, a history of traumatic episodes, a family history of lipoma, or a specific predisposing event.

Clinically, oral lipomas generally present as mobile, painless submucosal nodules, with yellowish tinge, as observed in our cases. In some cases, oral soft tissue lipomas can present as a fluctuant nodule.⁹ In some cases, speech and mastication problems could be seen because of the location of the lipoma. Because of these clinical features, other lesions, such as oral dermoid cysts, ranula,

pleomorphic adenoma and oral lymphoepithelial cysts must be considered in the differential diagnosis of oral lipomas.⁵ Although oral lymphoepithelial cysts present as movable, painless submucosal nodules with a yellow or yellow-white coloration, they differ from oral lipomas in that the nodules are usually small at the time of diagnosis and usually occur in the first to third decade of life. Also, most oral lymphoepithelial cysts are found on the floor of the mouth, soft palate and mucosa of the pharyngeal tonsil, which are uncommon sites for oral lipomas. Oral dermoid and epidermoid cysts also present as submucosal nodules and typically occur on the midline of the floor of the mouth.

It is difficult to differentiate between normal adipose tissue and lipomas microscopically, therefore, a clinician sending a surgical specimen to the pathologist for microscopic analysis must provide accurate clinical and surgical information in order to make a definitive diagnosis. The microscopic appearance of a circumscribed but not encapsulated aggregate of mature adipocytes with large clear cytoplasm in the absence of vascularity, atypia or metaplasia is diagnostic of a classical lipoma.

Surgical resection is the treatment of choice for this tumor.⁵ The surgical approach is dependent on the site of the tumor and the proposed cosmetic result.¹⁰ During surgical excision of lipomas which is located deeply in tissues, more caution should be exercised to protect the surrounding vital tissues. In our case, oral lipoma is very close to mental nerve so, mental nerve was protected during the operation and no complication was seen after the surgery.

CONCLUSION

Oral lipomas are relatively uncommon tumors; they have no gender predilection and they predominantly affect the buccal mucosa. Other lesions with similar clinical features can be considered in the differential diagnosis and clinicians must be able to recognize this oral lesion to carry out the correct treatment or refer the patient to a specialist. The ideal treatment is surgical excision, and no recurrence is expected.

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