

Surgical Excision Of Intraoral Lipoma; Case Report

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Abstract

Lipoma is a common tumor of soft tissue. Its location on the oral mucosa is rare, representing 1% to 5% of benign oral tumors although it is the most mesenchymal tumor of the trunk and proximal portions of extremities. Lipoma of the oral cavity may occur in any region. The buccal mucosa, tongue, and floor of the mouth are among the common locations. The clinical presentation is typically as an asymptomatic yellowish mass. The overlying epithelium is intact, and superficial blood vessels are usually evident over the tumor. Other benign connective tissue lesions such as granular cell tumor, neurofibroma, traumatic fibroma and salivary gland lesions (mucocele and mixed tumor) might be included in differential diagnosis. We present a case report of oral lipoma in the left side of the lower lip in 18 years old Saudi patient.

Keywords: Lipoma, tumor, buccal mucosa

Introduction

Lipomas are common tumors in the human body (Chidzonga MM et al., 2004; Vera JL et al., 2006), but are less frequent in the oral cavity, comprising no more than 1-5% of all neoplasms.(Vera JL et al., 2006; Trandafir D et al., 2007; Bandeca MC et al., 2007) 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. Some studies, however, have shown a male predominance (Bandeca MC et al., 2007; Lawoyin JO et al., 2008; Adoga AA et al., 2001).

Half of oral lipomas are in the cheek and the remainders were found in the tongue, floor of the mouth, lips, palate and gingiva (Vindenes H *et al.*, 1978). They are benign mesenchymal neoplasms composed of fat cells usually surrounded by a thin fibrous capsule (Frefnani ER *et al.*, 2003). The size of tumor depends on the location but rarely exceeds 25 mm in diameter (Rapidis AD *et al.*, 1982). Lipomas are usually asymptomatic until they grow

to large size and may interfere with speaking and mastication (Chidzonga MM *et al.*, 2004; Kesin G *et al.*, 2002). Although malignant counterpart of this tumor, liposarcoma, is another common soft tissue neoplasm, but its occurrence in oral cavity is rare (Visscher JG, 1982).

Case report

An eighteen years old Saudi young male was referred to Dental Clinics of College of Dentistry at Al-Jouf University (Sakaka, Saudi Arabia). The patient reports that a ball in the mouth has been present approximately one year, painless and he believes that it has grown significantly in the last four months. He complaint of traumatize the tissue while eating and this ball may have become ulcerated, bleeding and with pain. While the complete medical history revealed no systemic diseases.

The intraoral examination revealed a soft nodule was covered by normal mucosa on the internal margin of the lip and the mucosa appeared without any ulceration. Appear as soft, yellowish, and the size of the lesion was approximately 2 cm in diameter. Hypothesis diagnosis: lipoma and fiboma (Figure 1, 2 & 3).



Figure 1, 2 & 3: Soft and sessile mass in lower lip

In the pre-surgical preparation was collected all normal range of preoperative routine investigations; like complete blood count, coagulation tests and blood pressure. The patient was able to surgical excision of the lesion under local anesthesia on the dental chair.

Infiltration anesthesia around the lesion mepivacaine 3% with vasoconstrictor (Figure 4 & 5), followed by incision with a scalpel blade n° 15, giving the margin of the lesion, grasped with mosquito and tissue forceps to complete surgical resection. (Figure 6 & 7)

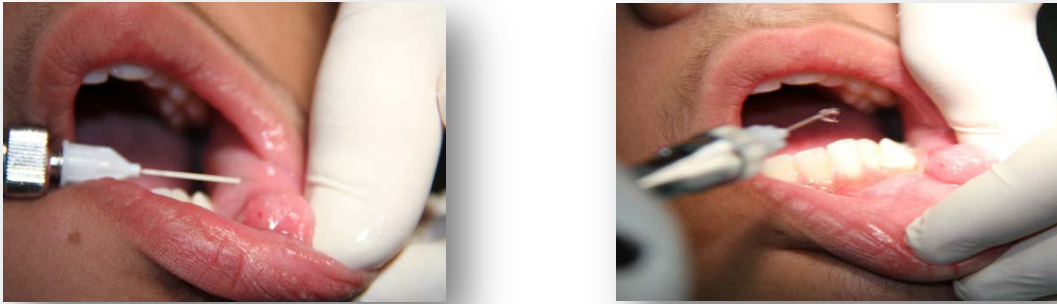


Figure 4 & 5: Infiltration anesthesia around lesion.

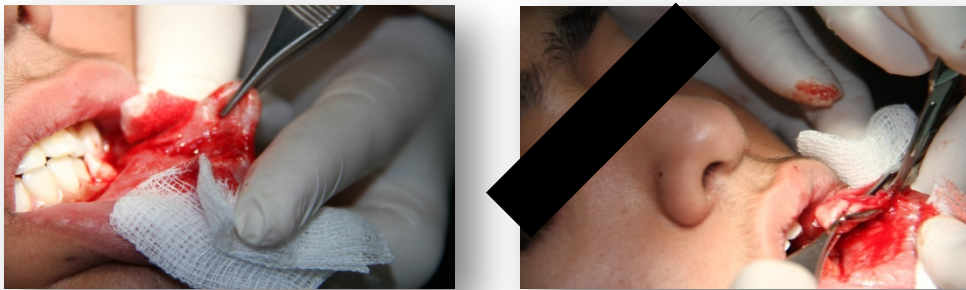


Figure 6 & 7: Grasped with mosquito & tissue forceps.

After removal of the lesion (Figure 8), then incision was sutured with 3-0 black silk suture (Figure 9). the piece was placed in the pot with water where it floated, showing the diagnosis of lipoma, and then the piece was transferred to the formaldehyde solution 10%, and sent to pathological examination, where the material was processed and examined, confirming the diagnosis of lipoma.

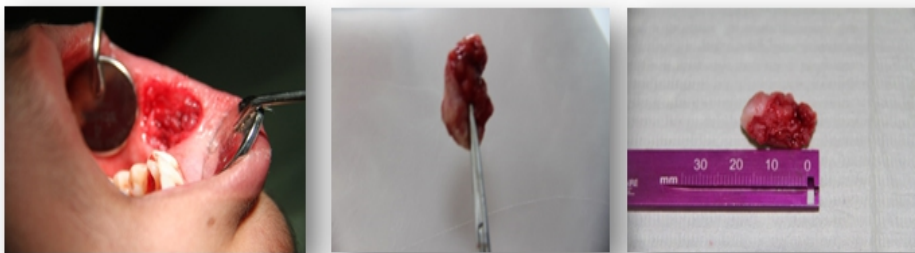


Figure 8: After removal of the lesion

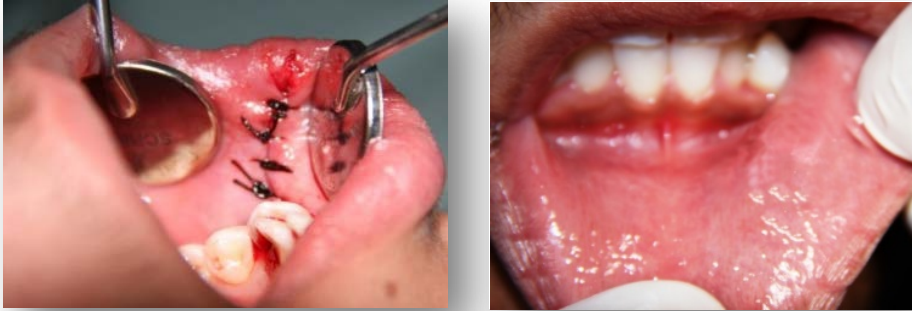
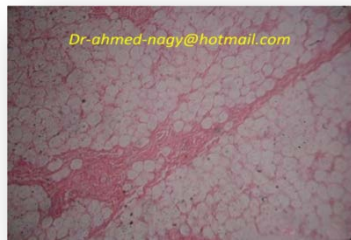


Figure 9: Suturing the incision



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Figure 10: Three months follow-up showed good healing and no evidence of recurrence.

On histologic examination (Figure 11), the tumor was composed of mature lipocytes and was well circumscribed and demonstrated a thin fibrous capsule. A distinct lobular arrangement of the cells was seen.

Discussion

Lipoma is a benign mucosa neoplasm well-know with differential diagnosis of others soft tissue pathologies. Although there is no difference in the election treatment plan which consists of complete surgical removal of the lesion with excisional biopsy (Freitas MA et al., 2009; Bandéca MC et al., 2007) and this case report occurred after the complete excision of lipoma after preoperative exams.

Lipomas are benign mesenchymal tumors that originate in mature fat cells, relatively rare in the oral cavity compared with other lesions. Generally they are well-circumscribed nodules and encapsulated and may be present in any region of oral cavity, however the buccal mucosa is the most prevalent followed by the tongue, lower lip and mouth floor (Weiss SW et al., 2009; Gnepp DR et al., 2001; Freitas MA et al., 2009). In this present case lipoma

was in the lower lip and in many studies is the second or third most prevalent area.

Freitas *et al.*, (2009) reviewed 26 cases of intraoral lipomas, classic lipoma was the most common in 15 cases, followed by fibrolipoma in 7 cases. In a review conducted in a Brazilian population by Fregnani *et al.* (2003), classic lipomas followed by fibrolipomas represent the lesions most commonly diagnosed among intraoral lipomas. However, Furlong *et al.* (2004) encountered a similar frequency of lesions accompanied by other benign lipomatous tumors.

The classification of these lesions establishes the following subtypes:

lipoma, fibrolipoma, intramuscular lipoma, salivary gland lipoma (Nagao T *et al.*, 2001), spindle-cells lipoma e intraosseous lipoma. Spindle-cell lipoma is a relatively uncommon benign lipomatous tumor, with few cases reported in literature (Kaku N *et al.*, 2003; Said-Al-Naief *et al.*, 2001). Said-Al-Naief *et al.* (2001) identified only two cases of this subtype in a revision of 164 intraoral lipomas cases, confirming the low prevalence of this subtype. Lipomas in some cases may be part of congenital alterations. An extremely rare form of intraoral lipoma was described by Mahabir *et al.* (2000) where the lesion was found associated with congenital cleft palate. Another case of congenital lesion was described by Perri de Carvalho *et al.* (1987) of a 7 years-old boy in the region of upper labial frenum, in this case the treatment eliminated the habited of sucking the lesion and eventually resulted in adjacent teeth eruption.

The histopathological features are a tumor composed of adipose tissue involved well differentiated connective tissue capsule. Although morphologically cannot be differentiated from normal fat cells, lipoma cells have faster metabolism. Sometimes the capsule may be missing or broken (Epivatianos A *et al.*, 2000). When the connective tissue is a significant part of the lesion begun to be fibrolipoma (Gnepp DR, 2009; Weiss SW *et al.*, 2001; Fregnani ER *et al.*, 2003).

Conclusion

Intraoral lipoma was a benign neoplasm with low prevalence in the oral cavity; clinicians must be able to recognize differential diagnosis and the correct treatment, surgical excision, to ensure the comfort, welfare and quality of life of patients.

Surgical excision is the main treatment. Recurrence is reduced by wide surgical excision (Vera JL *et al.*, 2006). Infiltrating lipomas are difficult to extirpate and are liable to recurrence (Chidzonga MM *et al.*, 2004; Adoga AA *et al.*, 2001).

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