

Intra-oral lipoma

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ABSTRACT

Lipomas are benign mesenchymal tumors that originate in mature fat cells, usually surrounded by a thin fibrous capsule. They are relatively rare in the oral cavity, accounting for 1% to 4% of all benign tumors and 0.5% to 5% of all benign oral cavity tumors. We present a case of a 60 year old male, who presented with a growth in lower left buccal mucosal region extending from mesial aspect of 35 to distal aspect of 36 that was treated by intra oral local excision. The purpose of this report is to highlight the existence of this rare but not uncommon disease and to emphasize that a high index of suspicion is needed in making a diagnosis. surgical excision as treatment is associated with an excellent outcome.

Key words: Buccal mucosa, fibrolipoma, lipoma, mature fat cells

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INTRODUCTION

Lipomas are benign mesenchymal tumors that originate in mature fat cells, usually surrounded by a thin fibrous capsule.^[1] They are the most common soft tissue tumor with 20% cases occurring in head and neck region.

Being relatively rare in the oral cavity, they account for 1% to 4% of all benign tumors.^[2,3] Oral lipomas, representing only 0.5% to 5% of all benign neoplasms in the oral cavity. They are painless, well circumscribed, slow growing, submucosal or superficial lesions, located mainly in buccal mucosa, followed by the tongue, floor of mouth and lips.^[1,4]

Lipoma, usually a solitary lesion may be sessile, pedunculated or submerged, ranging in size from

a small lesion approximately 1 cm in diameter to a massive tumor 5 cm. The surface is typically smooth and non-ulcerated with deeper lesions varying in contour and shape.^[5]

According to their histopathologic aspects, benign tumor of adipose tissue (lipoma) can be classified as:

1. Simple lipoma
2. Fibrolipoma
3. Angiolipoma
4. Intramuscular lipoma
5. Pleomorphic lipoma
6. Sialolipoma
7. Myxoid lipoma
8. Atypical lipoma

In order to prevent reoccurrence, adequate surgical excision is the treatment of choice.

This paper reports a case of lipoma of the buccal mucosa, along with a discussion and review of the literature.

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CASE REPORT

A 60 year old male came to the Department of Oral Medicine and Radiology, Ahmedabad Dental College and Hospital, Ahmedabad with the chief complaint of a growth in the lower left cheek region since 6 months. There was no history of trauma or fever, with no relevant past medical or dental, family or social history. The growth did not interfere with mastication, or any other function generally performed by the orofacial apparatus.

On general examination, the patient was of normal built and height with no obvious facial asymmetry extra-orally. His left submandibular lymph nodes were firm, palpable and non-tender.

The intra-oral examination revealed a single, well defined, pedunculated growth in left buccal mucosal region extending from mesial aspect of 35 to distal aspect of 36, with smooth, faint yellow colored surface. The growth was oval, soft in consistency and non-tender measuring 2cm × 2cm in size [Figures 1 and 2].

On the basis of the history and clinical examination, a provisional diagnosis of Intra-oral lipoma was made with fibroma and pyogenic granuloma as differential diagnoses.

Haematoxylin and Eosin stained section shows a thin, fibrous capsule around a lobular arrangement of mature adipocytes admixed with collagenic streaks. The adipocytes are identical to normal fat cells. Dilated capillaries with RBCs and chronic inflammatory cells are also seen. The whole lesion is surrounded by atrophic, parakeratinized stratified squamous epithelium. A final diagnosis of an in Fibrolipoma was, therefore considered, histopathologically [Figures 3 and 4].

Surgical excision is the treatment of choice for oral lipomas and therefore the lesion was approached intra-orally and no post-operative complications resulted [Figure 5].

DISCUSSION

Roux in 1848, for the first time described the oral lipoma and he referred it to as 'yellow epulis'.

Lipomas are benign mesenchymal tumors that originate in mature fat cells, with a rare incidence of 1% to 4% occurrence in oral cavity. The peak incidence age for lipoma is 40 years^[6,7] and above, while in our case, the patient was 60 years of age.

Generally their prevalence does not differ with gender, although male predilection has been recorded. The common site for oral lipoma is buccal mucosa, as was in our case, followed by the tongue, floor of mouth and lips.^[1,4]

No consensus exists till date, regarding the pathogenesis of oral lipoma, where heredity, fatty degeneration, trauma, hormonal basis, infection, infarction, metaphase of muscle cells, lipoblastic embryonic cell nest in origin and chronic irritation are plausible representative theories to elucidate the pattern of lipoma.^[8,9]

CLASSIFICATION: lipoma can be classified histopathologically as:

- Fibrolipoma: most common microscopic variant of oral lipoma, characterized by a significant fibrous component intermixed with lobules of fat cells.
- Angiolipoma: a mixture of fat cells and numerous small blood vessels.
- Spindle cell lipoma: variable amounts of uniform appearing spindle cells, typically in conjugation with a lipomatous compound.
- Pleomorphic lipoma: presence of spindle cells with bizarre hyperchromatic giant cells.
- Intramuscular/Infiltrating lipoma: more deeply situated and having an infiltrative growth pattern extending between skeletal and smooth muscle bundle.

Our case presented histopathologic features of Fibrolipoma.

Occurrence of multiple lipomas is associated



Figure 1: A single, well defined, pedunculated growth in left buccal mucosal region with smooth, surface



Figure 2: Gross specimen

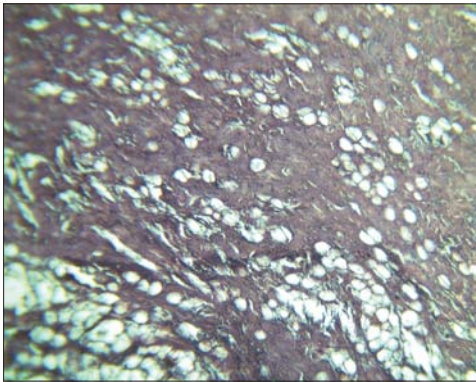


Figure 3: Photomicrograph showing a lobular arrangement of mature adipocytes admixed with collagenic streaks.(10x)

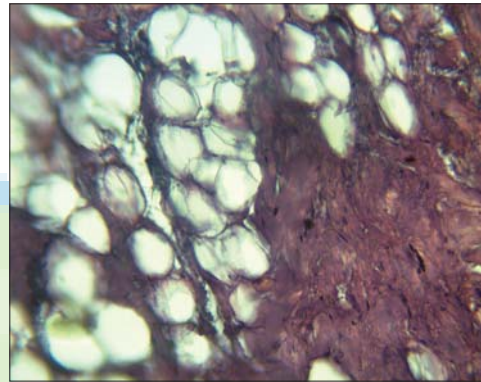


Figure 4: Photomicrograph showing mature adipocytes.(45x)



Figure 5: Surgical excision by intra-oral approach

with Cowden's syndrome or Multiple hamartoma syndrome. This condition is either familial or sporadic and is associated with the predominantly, post pubertal development of a variety of

cutaneous, stromal and visceral neoplasm, resulting from mutations of phosphatase and tensin homologue (PTEN) gene.^[10]

Some other lesions should be considered in differential diagnoses, and these include oral lymphoepithelial cysts, epidermoid and oral dermoid cysts.

Microscopically, it is difficult to differentiate between normal adipose tissue and lipoma, 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.^[11] As with all fatty tissue, a lipoma will float on the surface of formalin rather than sink to the bottom of a

biopsy specimen jar.

Microscopic appearance of a circumscribed but not encapsulated aggregate, with large clear cytoplasm, in the absence of vascularity, atypia of metaplasia is diagnostic of a classical lipoma.

Adequate surgical excision is the treatment for oral lipoma. The approach being dependent on the site of tumor and proposed cosmetic result, our patient's lipoma was approached intra-oral and no postoperative complication resulted.

CONCLUSION

Buccal soft tissue lipomas are rare tumors. Other lesions with similar clinical features can be considered in differential diagnosis, so high index of suspicion is required in making a diagnosis. Features of lipoma are usually straightforward and classical. Surgical excision is the ideal treatment with excellent outcome.

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