# **INTRA ORAL LIPOMA : A CASE REPORT**

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## ABSTRACT

Lipomas are benign mesenchymal tumors composed of mature adipocytes. Though they are abundant in head and neck region but intraoral lipomas are relatively uncommon. A case of intraoral lipoma occurring in right cheekin a 50-year-old male is reported along with discomfort and disfigurement of facial aesthetic. Wide surgical excision was performed and twoyear follow up showed excellent healing without any recurrence.

#### **KEY WORDS**

Lipoma, Mesenchymal tumors, Adipocytes, Intraoral lipoma.

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## INTRODUCTION

Lipomas are benign, mesenchymal neoplasms usually occurringin areas where adipocyte tissues are prevalent<sup>1</sup>. They can be found anywhere in the body with approximately 15-20% located in the head and neck region but only 1-4% affecting the oral cavity<sup>2</sup>. The most common areas are the buccal mucosa, lips, tongue, palate, vestibule, floor of the mouth and retromolar area<sup>3</sup>. Clinically lipomas are slowly enlarging, with a soft, smooth-surface mass of the submucosal tissues. When it is superficial, there is a yellow surface discoloration but color may varie depending on the thickness of the overlaying mucosa. The lesion may be pedunculated or sessile and occasional cases show surface bosselation<sup>4</sup>. They can be classified histopathologically as simple lipoma, fibrolipoma, spindle cell lipoma, intramuscular lipoma, chondrolipoma, pleomorphic lipoma, myxoid lipoma, angiolipoma and sialolipoma<sup>5,6</sup>. As it is a painless lesion, a patient can have an intra-oral lipoma for years without noticing it. Large intraoral lipoma can cause aesthetic as well as functional problem and sometimes pain due to repeated traumatic ulceration. Though some medical treatments have been tried but surgical excision is the choice of treatment.

## **PRESENTATION OF CASE:**

A 50 years old male patient was referred to the Department of Oral and Maxillofacial Surgery with the chief complaint of swelling on cheek in right side since last one and half years. The patient also complained of disfigurement of face and discomfort due to the swelling. His medical history was noncontributory. Extra oral examination revealed a well demarcated swelling in right side of the face just below the zygomatic prominence with normal facial skin color. It was round in shape and measuring 5 cm x 4 cm approximately (Figure 1). On palpation, the swelling was firm, non-pulsatile, nontender and mobile. On intraoral examination a diffuse swelling found in right cheek mucosa in relation to 15, 16, 17 region. The overlying mucosa was normal. Fine needle aspiration cytology was performed and showed fat cells. Surgical excision of the lesion followed by histopathological



Fig 1 : Extraoral view



Figure 3 : Dissected specimen

examination was planned. Surgery was performed under general anesthesia through intraoral approach. The excised specimen was yellowish, poorly encapsulated and multilobular mass (Figure2) measuring  $4\text{cm} \times 3\text{cm}$  in size (Figure 3) and was sent for histopathological examination. Patient was recalled after after 7 days for follow up and healing was uneventful.

The histopathology report of the specimen revealed an encapsulated lesion composed of abundant mature adipocytes arranged in lobules. The lobules are separated by fibrous connective tissue septa. The adipocytes appeared polygonal in shape with clear cytoplasm and eccentrically placed nucleus (Figure 4)

### **DISCUSSION:**

Lipomas are benign soft tissue neoplasm of mature adipose tissue seen as a common entity in the head and neck region. Intraoral lipomas are rare, the statistics showing only 1 to 4% affecting these sites<sup>7,8</sup> Though etiology of intraoral lipoma remains unclear two main theory have been suggested. The "Hypertrophy theory", which states that obesity and inadvertent growth of adipose tissue may contribute to their formation. This theory fails to explain the lesions that occur in areas lacking pre-existing adipose tissue<sup>9</sup>. The "Metaplasia theory" states that the aberrant differentiation of mesenchymal cells in lipoblasts causes lipomatous growth<sup>5,9,10</sup>. Trauma, infection, chronic irritation, chromosomal abnormalities or hormonal imbalances have also been suggested for some lipomatous growth<sup>5,6,11</sup>.



Fig 2 : Yellowish multilobular mass

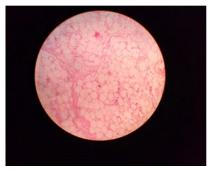


Fig 4 : Histopathology of the specimen

Lipomas can be found anywhere in the body with the majority located in the head and neck region as well as in the shoulder and back. Most common site of oral lipoma is the buccal mucosa followed by tongue, floor of the mouth, buccal sulcus and vestibule, palate, lip and gingiva<sup>12</sup>. The peak incidence of occurring lipoma is 4th to 6th decade of life but it can be found at any age<sup>3,13</sup>. There are several studies which revealed female predilection of this lesion but several studies also showed no difference in distribution between the sexes, with a male to female ratio of 1:1.2<sup>9</sup>.

The clinical behaviours may vary according to the location of the lesion. Intraoral lipomas usually manifest as a solitary, yellowish, round to ovoid, gradually increasing, sessile and submucosal growth<sup>14</sup>. The size of lipomas varies greatly, although most of the lesions are less than 10mm, they have been found upto 110mm.<sup>15</sup> Discomfort, feeling of fullness, esthetic are the main presenting symptoms but dysphagia, problem in mastication and speech also have been enlisted according to the size and location of the lesion. Though lipomas are usually found as a solitary lesion but literature revealed that 5% of the cases are multiple. Multiple lipomas have been found mostly associated with certain syndromes like neurofibromatosis, Gardner's syndrome, Decrum's disease, encephalocraniocutaneous lipomatosis, multiple familial lipomatosis, Proteus syndrome, and Pai syndrome<sup>9</sup>.

The diagnosis of intraoral lipomas is mainly clinical. MRI scans are very useful in the clinical diagnosis than CT scan and ultrasonography. Definitive diagnosis depends on correlation between the histological and clinical features. The differential diagnosis of intraoral lipoma includes oral dermoid and epidermoid cysts, oral lymphoepithelial cyst, benign salivary gland tumour, mucocele, benign mesenchymal neoplasm, ranula, ectopic thyroid tissue, and lymphoma<sup>14</sup>.

Histologically, the tumor is composed predominantly of mature adipocytes. They are often present with distinct lobular pattern and well demarcated from surrounding connective tissues<sup>16</sup>.

The treatment for intraoral lipoma is complete and conservative surgical excision. Recurrence is very rare, it may occur in the case of infiltrating lipomas basically due to an inadequate excision combined with a non-encapsulated lesion. Some studies also proposed the medical management of lipomas like intralesional steroid injection, liposuction with significant results<sup>9</sup>.

## **CONCLUSION :**

Intraoral lipomas are rare entity and often unnoticed by the patient. They are found either during routine dental check up or when it causes functional or esthetic problem due to enlarged size. As they are painless usually patients seek treatment only when it causes esthetic and functional problem. Surgical excision of the lesion is the best choice of treatment with minimum recurrence rate. Several medical treatments are tried but those need further study to be accepted as alternate treatment modalities.

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