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Lipoma of floor of the mouth: A case report

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ABSTRACT

Lipoma a benign mesenchymal tumor is a rare finding in the oral cavity. This paper reports a case of 75 years old male patient with a huge lipoma of the floor of the mouth, along with its management at the Department of Maxillofacial surgery at Abbasi Shaheed Hospital, Karachi Pakistan.

Conclusion: Lipoma of the floor of the mouth is very rare. We endorse complete surgical excision as an optimal treatment of oral lipoma.

Keywords: Lipoma; Mesenchymal tumor; Floor of the mouth (FOM).

Introduction

A benign mesenchymal tumor of adipocytes is known as lipoma [1]. They are commonly found in the body however only 15% occur in the head and neck region [1]. The incidence of lipoma in the oral cavity has been reported to be less than 4% [1]. According to anatomical distribution within the oral cavity, it is found in descending order of frequency in the buccal mucosa, tongue, labial mucosa, gingiva, and very rarely in the floor of the mouth [2]. The etiology of oral lipomas is mainly trauma or it can be idiopathic [3]. Most of the studies report no gender predilection [4]. They clinically present as asymptomatic, slow-growing, well encapsulated, and lobulated soft tissue mass [5]. Lipomas are often small in size but can grow to a large size that can interfere with the main functions of the oral cavity i.e. speaking and mastication [5]. The purpose of this paper is to report a rare case of lipoma of the floor of the mouth in an old male patient along with its clinical management and present a review of the literature.

Case Report

A 75 years old male patient presented to the outpatient department of oral and maxillofacial surgery at Abbasi Shaheed Hospital, Karachi Pakistan, with a painless swelling on the right side of the floor of the mouth for 2 months. The swelling increased in size progressively, was not associated with any discharge or ulceration. Medical

On clinical examination, maxillary and mandibular arches were partially edentulous with multiple carious broken down roots, few teeth with grade 1 mobility, and poorly fitted dentures. A 4.5cm x 2.5cm ovoid, dome-shaped mass could be seen on the right side of the floor of the mouth, extending from the right central incisor to the right second molar region Fig 1.

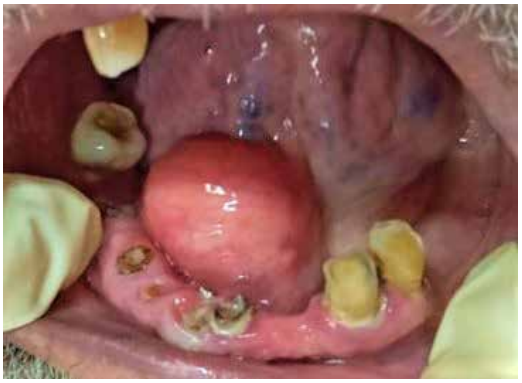

Figure 1. Preoperative picture of dome shaped soft tissue mass at the right side of floor of the mouth.

On palpation, it was a soft, smooth-surfaced, non-tender, non-fluctuant, sessile mass not attached to the overlying mucosa. No paresthesia or anesthesia of mucosa was present. There were no signs of lymphadenopathy. On ultrasound, there was an altered echogenic lesion with no internal vascularity at the right side of the floor of the mouth. Surgical excision of the mass under local anesthesia was planned. All preoperative investigations were normal. An incision was made in the floor of mouth mucosa above the swelling, blunt dissection was carried out with great caution to separate the mass from surrounding tissues. According to intra-operative findings, it was a soft, well-encapsulated, yellowish lobulated mass, measuring approximately 4.5 x 2.5 x 1cm in size Fig 2.

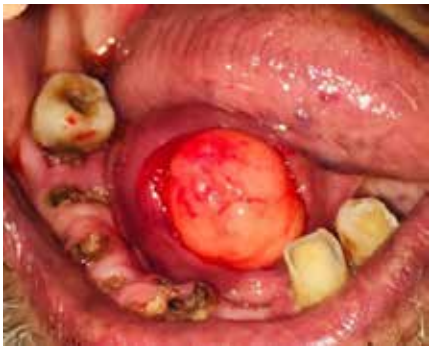

Figure 2. Intra operative clinical picture showing yellowish well-encapsulated mass.

The mass was easily separated from the sublingual gland and Wharton's duct. The entire mass was delivered in toto Fig 3.

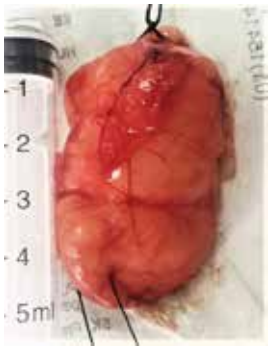

Figure 3. The excised specimen.

Hemostasis was achieved, and patency of Wharton's duct was ensured. Watertight closure of the wound was done. When the excised mass was placed in normal saline it floated to the surface. The specimen was sent to laboratory for histopathological examination in a biopsy bottle containing formalin. Histopathology report revealed a benign lipomatous lesion comprising of lobules of mature adipocytes separated by thin fibrous septae. There was no cellular atypia or lipoblasts Fig 4.

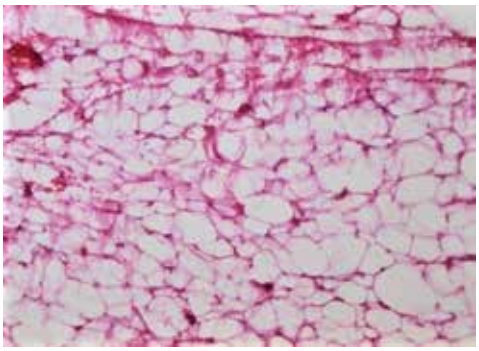

Figure 4. Histological slide showing ovoid mature adipocytes separated by thin fibrous septae.

Thus, a definitive diagnosis of lipoma was made. Recovery was uneventful and there was no post-operative neurosensory or functional deficit. The patient was followed up for 12 months with no signs of recurrence.

Discussion

Lipoma was first described by Roux (1848) as yellow epulis in alveolar mucosa [1]. The etiopathogenesis of lipomas remains uncertain, different proposed theories include local irritation, trauma, infection, embryonic origin, metaplasia of muscle cells, and fatty degeneration [6]. Oral lipomas are relatively uncommon tumors less than 4% of all benign tumors and among intraoral sites predominantly affect buccal mucosa usually during the sixth and seventh decade of life [5]. Tumors of the adipose tissues are classified on the basis of histological features into simple lipoma, infiltrating lipoma,

angiolipoma, fibrolipoma, pleomorphic lipoma, osseolipoma, chondrolipoma, myxolipoma, sialolipoma and spindle cell lipoma [7]. Classic lipoma and fibrolipoma are the two most common variants [8]. There is no significant difference in the clinical behavior of all subtypes of lipomas [9]. Oral lipomas are slow-growing, well-circumscribed, encapsulated, asymptomatic, and painless [5]. They usually present with a mean diameter of 2cm [9]. In this case report, the tumor size was exceptionally large i.e. 4.5 x 2.5 x 1cm.

On histological examination, lipomas cannot be distinguished from normal adipose tissues, they only differ due to the difference in metabolism [4]. Normal adipose tissues breakdown on starvation and get utilized as an energy source for the body however fat deposits in lipomas are not utilized [4]. According to literature, the growth of lipoma depends on high lipoprotein lipase activity. Considering the proliferative activity of lipomas, literature shows there is increased expression of PCNA and ki-67 in all histological subtypes [8]. Differential diagnosis of lipoma can be easily established on basis of striking clinical features and radiological investigations but histopathology remains the gold standard for the definitive diagnosis [3]. Our differential diagnosis included ranula, sialocele, dermoid cyst, lipoma, and adenoma in the floor of the mouth. A misdiagnosis can lead to unnecessary surgical excision of sublingual or submandibular glands in this region. The first line radiological investigation for diagnosis of soft tissue mass is ultrasound as it is cheap, readily available, and relatively sensitive [10]. Further preoperative imaging used to aid in proper diagnosis and surgical planning include computed tomography scan and magnetic resonance imaging [3,4]. The treatment of oral lipoma for all subtypes is surgical excision [11]. Prognosis is good and recurrence is rare. [11]. Malignant transformation has not been reported. We also treated this patient with lipoma of the floor of the mouth with complete surgical excision. After a follow-up of 12 months, there was no recurrence.

Conclusion

Lipoma of the floor of the mouth is very rare. We endorse complete surgical excision as an optimal treatment of oral lipoma.

Conflict of Interest

There is no conflict of interest to declare.

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