Case Report

Oral Lipoma: An Uncommon Case Report with Ultrasonographic Finding

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Abstract

Lipoma is most common tumor of mesenchymal origin and is rarely seen in the oral and maxillofacial region. The etiology is still unknown. Various theories are given explaining the pathogenesis of adipose tissue tumor. Intraoral lipoma is a rare entity, painless and mostly diagnosed on a routine dental check-up. We report a case of intraoral lipoma on the buccal mucosa of a 60-year-old female patient with its ultrasonographic appearance in detail.

Keywords: *Benign neoplasm, lipoma, oral cavity, ultrasonography*

Introduction

Lipoma is most common tumor of mesenchymal origin, comprising of mature adipocytes, mostly surrounded by a thin layer of fibrous capsule. They develop mostly in the subcutaneous tissues and in deep tissues too.[1] In the head and neck, lipomas are rare, accounting for 1%–4% of benign tumors. They present as long-standing, well-circumscribed, rubbery, nodular asymptomatic swelling covered by normal mucosa.[2] Most of the oral lipomas occur in the buccal mucosa and buccal vestibule, other sites including the major salivary glands, lip, tongue, palate, and floor of the mouth.[3] The etiology and pathogenesis are unclear, some stating mechanical, endocrinal, and inflammatory influences.[4] This case report describes the clinical, ultrasonographic, and histopathological findings.

Case Report

A 60-year-old female patient visited the department with a chief complaint of swelling in the lower left front region of the mouth for the past 3 months. Not associated with pain, functional impairment, or any other difficulty in speech and deglutition. The lesion was well defined, solitary, sessile, dome swelling seen on the left buccal mucosa about 1 cm × 1 cm, yellowish in color, with smooth surface [Figure 1]. On palpation, the swelling was nontender, firm, superficial mucosa was intact with no ulceration or indentation. Ultrasonography was performed and the findings were hypoechoic ovoid to round-shaped areas seen in the submucosal structure of left cheek [Figure 2]. Excisional biopsy was planned under local anesthesia; the excised specimen was 1 cm × 1 cm in size [Figure 3] and was sent for histopathological examination. A review after 7 days showed uneventful healing; hence, the sutures were removed [Figure 4]. The histopathology revealed well-circumscribed capsulated lesional tissue consisting of lobules of round to oval-shaped plump cells with clear cytoplasm and eccentrically placed nucleus suggestive of mature adipocytes separated by thin fibrous septae along with scattered inflammatory cells.

Discussion

Lipomas are adipose mesenchymal tumors, statistics showing less frequency in the oral cavity, accounting for only 1%–4%.[5] The first case was reported by Roux in 1848, and he had referred it to as "yellow epulis."[4] The etiology of lipoma is still unclear; hypertrophy theory suggests that obesity and inadvertent growth of adipose tissue lead to its formation. This theory is less convincing at the lesions that occur in areas lacking preexisting adipose tissue. The Metaplasia theory states that lipomatous development is due to aberrant differentiation of *in situ* mesenchymal cells into lipoblast. Other mechanisms such as trauma, infection, chromosomal abnormalities, or hormonal imbalances have been proposed.[4-6]

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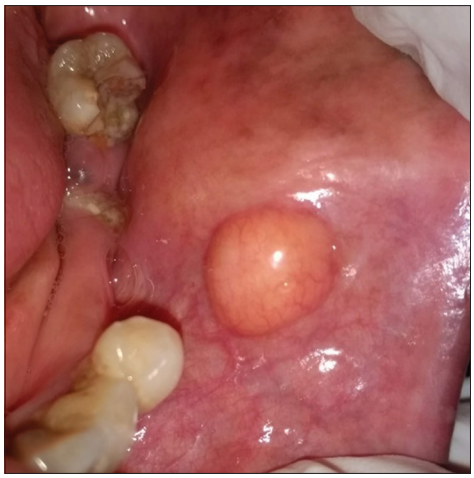

Figure 1: Well-circumscribed, solitary nodular swelling

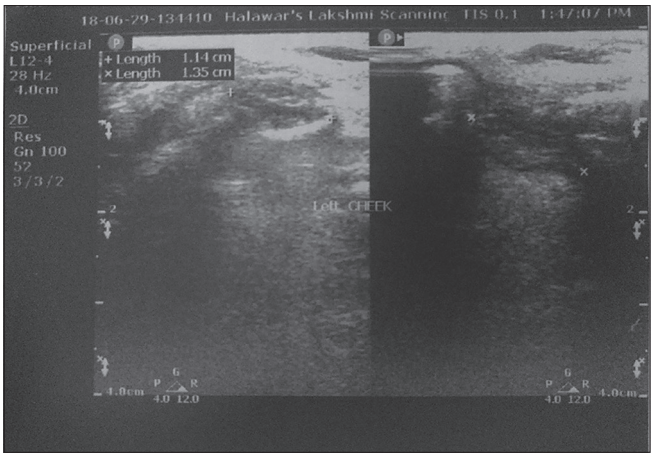

Figure 2: Ultrasonograhy showing hypoechoic areas

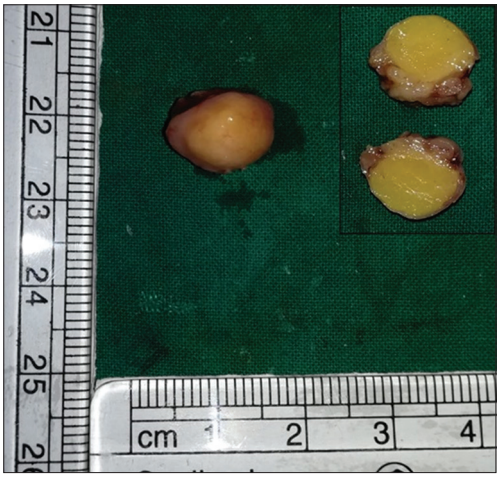

Figure 3: Excised specimen

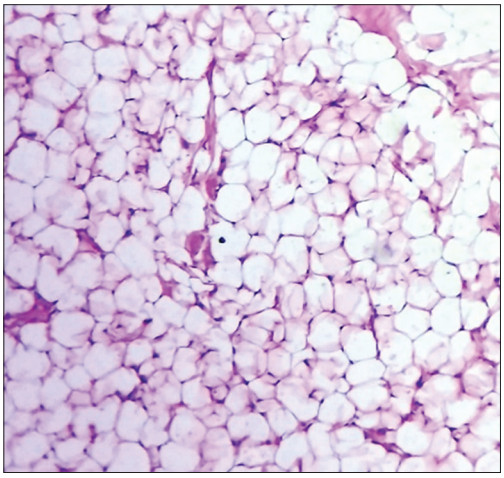

Figure 4: Histopathology showing aggregate of mature adipocytes with large clear cytoplasm and eccentric nuclei

Lipoma is seen in adults mostly in the sixth and seventh decade of life and frequently seen in female patient. Intraoral lipoma most commonly seen on the buccal mucosa, followed by buccal vestibule, retromolar area, tongue, and other sites.[7] They occur more commonly in female patients than in male patients.[8] Lipoma clinically manifests as painless, sessile, slow growing, and size varies from 2 mm to 15 mm in diameter.[4] Lipomas can be superficial which are easily palpable and deep lipomas are not palpable usually and require imaging examination like ultrasonography.[8]

Imaging examination like ultrasonography helps to distinguish between the mass and adjacent tissue, also to delineate its boundary whether it is adherent to underlying muscle or salivary gland. Ultrasonography is noninvasive, quick, more economical and uses high frequency transducers, suitable for detecting superficial lesions. The echogenicity of lipoma is related to number of internal interfaces between fat and connective tissue; purer the fat tissue more hypoechoic the result.[7,8] In our case, the ultrasonography showed hypoechoic areas similar to findings by Cole *et al*.[9] Other investigating modalities like computed tomography and magnetic resonance imaging (MRI) can also be used; but ultrasonography is quick, easy, uses high frequency transducer suitable for superficial lesions. However, when the mass is difficult to identify on ultrasonogram, computed tomography or MRI is advised.[9] The differential diagnosis of intraoral lipoma consists of oral dermoid and epidermoid cyst, oral lymphoepithelial cyst, benign salivary gland tumor, mucocele, benign mesenchymal neoplasm.[5] Complete surgical excision is the main treatment of lipoma. There is no recurrence after excision. Newer nonsurgical treatment modalities are still under trial which may come into practice in recent future.

Conclusion

Intraoral lipomas are a rare entity which is often noticed on a routine dental check-up. Most of them rarely cause

pain hence delay in seeking treatment. Adequate surgical excision is the choice and has a rare recurrence.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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