

Intraoral lipoma – A rare case presentation

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SUMMARY

Lipomas are the benign soft tissue neoplasms of mature adipose tissue. Most of them develop in the subcutaneous tissues, sometimes deeper tissues may be involved as well; the oral cavity is uncommonly involved. About 20% of lipomas occur in the head and neck region among which oral lipomas comprise only 1-4% of all lipomas. Oral lipomas are most commonly seen involving the major salivary glands, buccal mucosa, lip, tongue, palate, vestibule, and floor of mouth. Although it is a benign neoplasm, their progressive growth may cause interference with speech and mastication. Here with, the present paper reports a rare case of intraoral lipoma in 36 year old female patient.

Key words: lipoma, oral cavity, adipocytes

Introduction

Lipomas are rare in oral and maxillofacial regions although they are the most common tumours of mesenchymal origin in human body. In the head and neck region, it accounts for about 15 to 20% of the cases, while 1–4% affects the oral cavity, an uncommon site for the occurrence of lipoma (1,2). They are composed of mesenchymal adipose cells, covered by a thin mucosa, and can occur in any tissues or organ of body (1). Their etiology and pathogenesis remain unclear, although mechanical, endocrine and inflammatory influences have been reported (3,4). Intraoral lipomas are usually asymptomatic and presents as well defined, slow growing, smooth surfaced yellowish growth which may be sessile or pedunculated (5,6). The diagnosis is made by pathology of an incisional or excisional specimen. An important feature is that the tumor tends to float when placed in a 10% formaldehyde solution (1). Treatment consists of conservative surgical removal of the lipoma; recurrences are rare (7).

Case report

A 36-year-old female patient was reported to the Department of Oral Medicine and Radiology with chief complaint of a growth in right side of the cheek region. History of presenting illness revealed that the growth was small at the time of her initial observation, 3 years back, which had gradually enlarged and had attained the present size. It was not associated with any pain, but pain was occasionally felt, with some discomfort, while chewing food. On intraoral examination, a single, dome shaped, pedunculated growth was noted on the left buccal mucosa measuring approximately 1.5×2 cm in diameter, which was well circumscribed, smooth surfaced. The colour of the growth was normal to that of the adjacent mucosa (Figure 1). Palpatory findings revealed that it was soft in consistency, with slippery borders and that it was non-tender (Figure 2A and 2B).

Provisional diagnosis of a fibroma was considered, based on its above mentioned clinical features, and a first differential diagnosis of a lipoma was given, because of its consistency and slippery borders. The lesion was excised completely and was sent for a histopathological examination. Histopathological picture showed parakeratinized, stratified squamous epithelium and underlying connective tissue. The connective tissue shows a well defined lesion consisting of mainly adipose tissue surrounded by fibrous connective tissue capsule. Mature adipocytes are seen with clear cytoplasm and flattened nucleus at the periphery arranged in lobules. Few chronic inflammatory cells, blood vessels and extravasated RBCs are also seen (Figure 3). By correlating both the above clinical and histological findings, a final diagnosis of an intraoral lipoma was made. The patient was reviewed after 2 weeks, and complete healing of the lesion was noticed.

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Figure 1. shows a single, dome shaped, pedunculated growth on the left buccal mucosa measuring approximately 1.5x2 cm in diameter, which was well circumscribed, smooth surfaced.



Figure 2 (A and B). shows that the growth is pedunculated, soft and slippery.



Figure 3. Histopathological examination showing parakeratinized, stratified squamous epithelium and underlying connective tissue, showing a well defined lesion consisting of mainly adipose tissue surrounded by fibrous connective tissue capsule.

Discussion

Lipomas develop mostly in the subcutaneous tissues and

very rarely involving deep tissues. The trunk and limbs of the body are the most commonly involved areas, and seldom the oral and maxillofacial region (1,8). The occurrence is higher in females than in males (9). The female to male ratio for all lipomas is 2: 1, but oral lipomas occur more in men than in women (1.5: 1) 10 or have no gender predilection (11). In the case presented, it affected the female patient contrary to the gender predilection as presented in the literature.

The exact etiology and pathogenesis of lipoma remain unclear, but few influences have been reported in the literature, that include endocrine, mechanical, and inflammatory causes (1,3). Very few reported cases of intra oral lipomas have shown rearrangements of 12q, 13q, and 6p chromosomes (12).

Usually they are well-circumscribed and encapsulated nodule 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 (4,13). Clinically, these are painless, mobile, sub-mucosal nodules, which have a yellowish colour. They can be sessile or pedunculated, and the consistency varies from soft to firm (5). In this present case, lipoma was in the left buccal mucosa, which is the most common intraoral site. On palpation, it was pedunculated, painless, mobile and soft in consistency similar to the clinical findings reported in the previous literature.

The classification of these lesions establishes the following subtypes: lipoma, fibrolipoma, intramuscular lipoma, salivary gland lipoma (14), spindle-cells lipoma e intraosseous lipoma (15). Freitas et al. in 2009 reviewed 26 cases of intraoral lipomas, classic lipoma was the most common in 15 cases, followed by fibrolipoma in 7 cases (4). In a review conducted in a Brazilian population by Fregnani et al. in 2003, classic lipomas followed by fibrolipomas represent the lesions most commonly diagnosed among intraoral lipomas (1).

The principal differential diagnosis of lipomas includes fibromas, granular cell tumor, liposarcoma, mixed tumors, mucocele, neurofibroma and traumatic fibroma (13). The occurrence of multiple lipomas includes cowden's syndrome and multiple hamartoms syndromes (16).

Fine needle aspiration biopsy (FNAB) sometimes is useful for a direct diagnosis (17,18). There are many imaging techniques that could be used to identify soft tissue masses, such as computerized tomography (CT), magnetic resonance imaging (MRI) and ultrasonography. Ultrasonography is quick, easy, less costly, and, with the use of high-frequency transducers, it is really suitable for evaluation of superficial structures, especially when difficulties exist in identifying the mass from adjacent tissues, as it happens in the oral and maxillofacial region. Most of lipomas are hypo-echoic with echogenic lines or spots (19,20).

The histopathological features are a tumor composed of adipose tissue involved well-differentiated connective tissue capsule. Similar findings were noticed in our case. These features were shared with fibrolipomas (4). Histopathology is considered to be the gold standard in the diagnosis of lipomas. The diagnosis is made, based on pathology of an incisional or excisional specimen.

The treatment of oral lipomas is a simple surgical excision. Recurrence of intra-oral lipomas is rare, but intra-muscular type of lipomas has a higher recurrence rate because of their infiltrative growth pattern, but this type of variant is rare in the oral and maxillofacial region (7). The prognosis of this tumor is good. The complete resection should be emphasized during

the first surgical operation, which is the key factor in order to avoid recurrence (12). Well-encapsulated lipomas, as the present case, easily shell out with no possibility of recurrence or damage to the surrounding structures.

Conclusion

Intra-oral lipomas are slow growing and very rare entity. Awareness about these rare entities is very important during the routine clinical practice by differentiating them from other pathologies, so that adequate surgical excisions can be done, in order to reduce the recurrence rate and to thereby ensure that the patients get comfort and quality of life.

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