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Case Report

Oral lipoma-a clinically rare anamoly- A Case Report

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Abstract

A lot of overgrowths are found in oral cavity which are either associated with poor oral hygiene or some congenital anomaly. Among these oral overgrowths, oral lipomas are a rare clinical entity. Their occurrence range from 1 - 4% with predilection for males as compared to females. Various sites are affected including the major salivary glands, buccal mucosa, lip, tongue, palate, vestibule and floor of mouth but more than 50% lesions are observed in buccal mucosa alone. Although they are benign in nature, their progressive and aggressive growth may lead to interference with speech and mastication due to tumour's dimensions and locality. The clinical presentation of an oral lipoma is usually a painless yellowish mass comprising of a well circumscribed and lobulated mass of mature fat cells. The lesion primarily affects the individuals ranging from 4th to 5th decades. The management of lipoma involves surgical excision by either scalpel, lasers or electro-cautery. Though the chances of recurrence are less but incomplete removal can cause the lesion to again regrow at the same or some other site. In this case report an oral lipoma in a middle-aged female was surgically treated using scalpel and patient was put on professional recalls at regular intervals. No recurrence was observed.

Keywords: Lipoma; Benign; Excision; Buccal Mucosa; Scalpel

Introduction

Oral overgrowths are frequently encountered by clinicians and oral lipomas form a rare clinical entity among these overgrowths. Originally, they were first described in 1848 by Roux, who was actually doing a review on alveolar masses and there, he observed and coined the term "yellow epulis" for lipoma [1-4]. The occurrence of oral lipoma is rare (1 - 4%) and males are more affected as compared to females [5]. Buccal mucosa accounts for 50% of oral lipoma in the oral cavity followed by tongue, floor of the mouth, buccal sulcus and vestibule, palate, lip and gingiva [6]. The nature of lipoma growth appears to be a slow growing painless lesions having a typical yellowish color, soft and doughy feel and individuals in fourth and fifth decades are commonly affected by this lesion [1].

Clinical features

The appearance of lipoma is a soft, well-circumscribed and non-infiltrating growth which can be either solitary or multiple in nature. In many cases the size of the lesion is usually than 3 cms, but these lesions can reach upto 4 - 6 cms with the progression of time.1 The pathogenesis of lipoma is unclear, but it has been observed that their appearance seems to be more common in obese people [1]. However, the metabolism of lipoma is completely independent of the normal body fat i.e. there is no reduction in the size of lipoma after the calorie intake is reduced. Other reasons suggestive of lipoma formation are trauma, infection, chronic irritation and hormonal irritation [7,8]. It is a benign tumour of mesenchymal cells and has many syndromes associated with it like neurofibromatosis, Gardner syndrome, encephalocraniocutaneous lipomatosis, multiple familial lipomatosis and Proteus syndrome [9].

Case Report

A female patient, aged 35 years reported to the Department of Periodontology, Bhojia Dental College and Hospital, Bhud (Baddi) H.P., with a chief complaint of growth in the right buccal mucosa region since 1 year. History of chronic irritation from removable partial denture was evident for which patient was taking treatment from department of Prosthodontics. Family and medical histories showed no significance. Regional lymph nodes were also not palpable. Clinical examination revealed sessile, isolated, circumferential growth (2 X 4 cm) attached with the buccal mucosa (Figure 1). The lesion was of same colour as that of the surrounding normal mucosa and was soft in consistency (Figure 1). On the basis of clinical examination and history, a provisional diagnosis of lipoma was made. Surgical excision with scalpel was planned.

Figure 1: Pre-operative view of lesion.

Figure 2: Lesion excised.

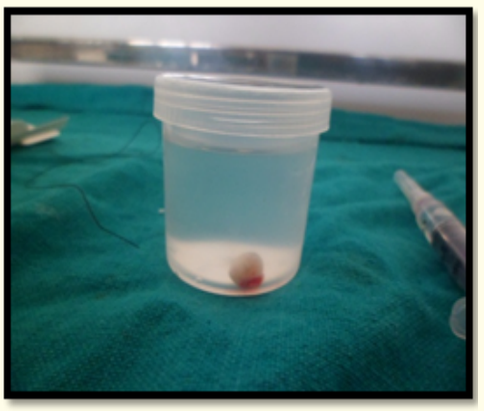

Figure 3: Lesion sent for histopathology examination.

After proper investigations, the patient was given written and verbal information on the nature, risks and benefits of the surgical procedure and a signed, informed consent was obtained prior to the treatment. The surgical excision was performed under local infiltration (2% lidocaine, with adrenaline 1: 2,00,000). The lesion was held with tissue forceps and excised. Care was taken to excise the tissue in such a way that it was completely removed from the mucosa (Figure 2 and 3). Analgesics/anti-inflammatory drugs were prescribed. Proper oral hygiene instructions were given. Patient was recalled after 1 week, 3 months and 6 months (Figure 4 and 5). Healing was uneventful after 1 week (Figure 4).

Figure 4: Post-operative view (1 week).

Figure 5: Post-operative view (6 months).

Excised tissue was sent for the histopathological examination. Histological examination showed mature adipocytes arranged in bundles demonstrating clear cytoplasm and eccentric nucleus (Figure 6). There was presence of intervening fibrovascular connective tissue septa and appearance of adipocytes was lobulated. These features were suggestive of Lipoma.

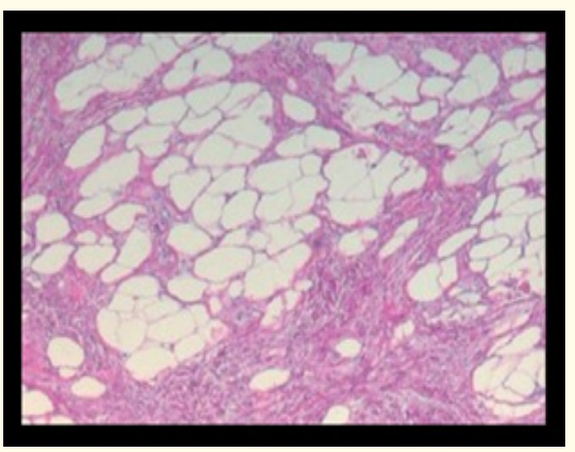

Figure 6: Histopathology view showing adipocytes.

Discussion

Among the oral overgrowths, Lipomas are the rarest mesenchymal tumours which are clinically observed. Generally, their prevalence is not related with gender, but some studies have proven male predilection and occurrence is observed in older age group i.e. 40 years and above [1,6,10]. The cheek is the commonest site of occurrence in the intraoral cavity which is followed by tongue, floor of the mouth, buccal sulcus and vestibule, palate, lip and gingiva [6]. Oral lipomas are basically slow growing in nature and patients often complain of a well-circumscribed nodule that has been developing for several years [1]. On clinical examination, lipoma appear as painless submucosal nodules, with yellowish tinge but in some cases oral soft tissue lipomas can present as a fluctuant nodule resembling the adjacent mucosa associated with trauma or chronic irritation from some prosthetic appliance (as in our case). Due to presence of these clinical features lesions like oral dermoid, fibroma, pyogenic granuloma, epidermoid cysts and oral lymphoepithelial cysts must be considered in the differential diagnosis of oral lipomas [11]. Although, oral lymphoepithelial cysts present as a movable, painless submucosal nodules with a yellow or yellow-white colouration, they can be differentiated from oral lipomas in that the nodules are usually small at the time of diagnosis and usually occur in the first to third decade of life while lipoma occur at 4th to 5th decades [1]. Also, most oral lymphoepithelial cysts are observed at varying sites like the floor of the mouth, soft palate and mucosa of the pharyngeal tonsil while oral lipomas have preference for buccal mucosa and salivary glands [12]. Oral dermoid and epidermoid cysts also present occur on the midline of the floor of the mouth while lipomas are found in extremities [13]. Pyogenic granuloma is associated with preference for gingiva and occurs in young age group in contrast to lipoma which shows preference to buccal mucosa and older age group at 40 - 50 years [14]. Similarly fibroma (peripheral fibroma) has preference to maxillary anterior region and occurs in age group of 20 - 30 years while lipoma occurs on buccal mucosa at 40 - 50 years [15].

Lipomas have a less dense and more uniform appearance as compared to surrounding fibrovascular tissue when transillumination is performed. Definitive diagnosis depends on correlation between the histological and clinical features. a classical lipoma. The histopathology is still the gold standard in the diagnosis of lipoma. Lipomas are not very different in microscopic appearance from the surrounding fat cells [1]. When they are compared with fat, it is observed that there are mature fat cells which vary slightly in size and shape reaching up to 200 mm in diameter. Subcutaneous lipomas are usually thinly encapsulated in nature and have distinct lobular patterns. Deep-seated lipomas comparatively have a more irregular configuration depicting the site of origin. Good vascularity is present in lipoma but under normal conditions, the vascular network is compressed by the distended lipocytes and is not clearly discernible [1]. Lipomas are occasionally altered by mesenchymal elements and among them the most common element is fibrous connective tissue, which is sometimes hyalinized and may or may not be associated with the capsule or the fibrous septa [16]. Histologically, lipomas can be classified into the following microscopic subtypes: simple lipomas, fibrolipomas, spindle cell lipomas, intramuscular or infiltrating lipomas, salivary gland lipomas, myxoid lipomas, and atypical lipomas [17]. Despite the close histological similarity to normal adipose tissue, lipomas, also have chromosomal aberrations such as translocations involving 12q13-15, locus interstitial deletions of 13q, and rearrangements involving 8q11-13 locus [18].

The treatment of all oral lipomas is simple surgical excision. The need for the excision lies in the fact that the lesion in the present case was interfering with speech and mastication causing a lot of discomfort. In our case, care was taken in such a way that the lesion was completely excised and no recurrence was observed after 1 week, 3 months and 6 months, post-operatively. Although a lot of treatment options are available like lasers and electrocautery, we have chosen the scalpel method since the patient was clinically healthy with absence of any no systemic disorders [15].

Conclusion

Clinicians often encounter a large number of overgrowths in oral cavity. An isolated enlargement that has no obvious etiological basis should be biopsied as early as possible so that the chances of its malignant transformation are reduced and further, the lesion is easily identified and treated and a strong clinical update is available for it. Since oral lipoma has chances of recurrence, it becomes essential for the clinician to excise it thoroughly from the base. In addition to that, all the known and unknown etiological factors must be completely eliminated.

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