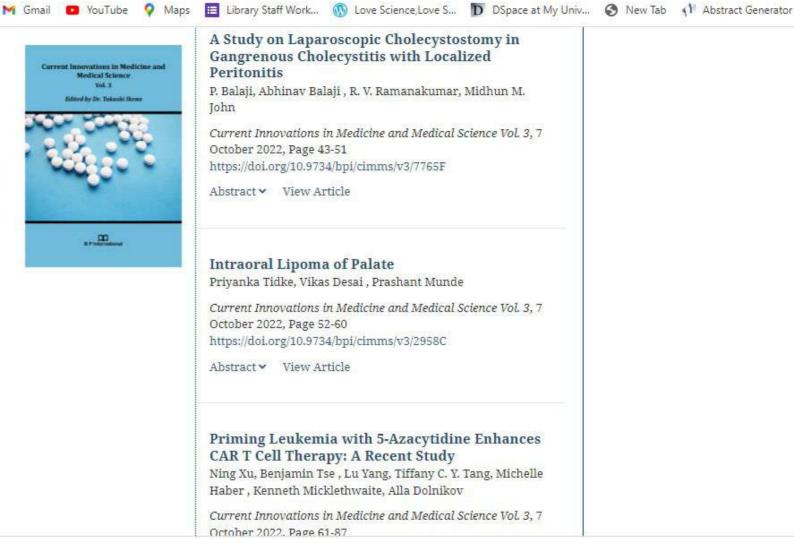


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Intraoral Lipoma of Palate

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ABSTRACT

Lipomas are the most frequent benign soft tissue tumours in the body, yet they are very uncommon in the oral cavity. Whenever they are seen in oral cavity; buccal mucosa, floor of mouth and tongue are the most commonly affected. Intraoral lipomas are characterised by benign, well-encapsulated swelling that is painless and has a yellowish colour. We present a case of an intraoral lipoma in which a 22-year-old girl came with a single well-encapsulated enlargement in the posterior region of the palate on the left side. The purpose of this book chapter is to emphasise the need for dentists to be aware of frequency of occurrence of intraoral lipoma so that prompt management can be done for the oral pathologies.

Keywords: Palatal mucosa; adipocytes; lipoma; intra-oral.

1. INTRODUCTION

Lipomas are the most frequent benign mesenchymal neoplasms in the human body, consisting of mature adipocytes enclosed by a fibrous capsule. Lipoma, also known as fatty tumour, is the most frequent benign tumour generated from mesenchymal adipocytes, with a prevalence of 15-20% in the head-neck area. They are uncommon intraorally [1,2]. Clinically, it appears as asymptomatic, slowly growing, soft and smooth-surface submucosal swelling that is most usually found superficially but can occasionally be found deeply. Because of the thin mucosal coating, a yellowish colour tinge is most typically visible in superficial lipomas, which helps to distinguish the lipoma from other soft tissue swellings. It can appear as a sessile or pedunculated lump. Usually found on the buccal mucosa, tongue, floor of the mouth, and occasionally the lips. Its differentiation from the other soft tissue neoplasms is necessary to arrive at the

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correct diagnosis and to execute proper treatment plan [3,4]. Here is a report of this uncommon clinical entity involving left palatal mucosa in a female patient along with clinical and histopathological features with no recurrence on follow-up.

2. CASE REPORT

A 22-year-old female patient presented with the chief complaint of growth in left back palatal mucosa since 1 month. The growth was initially small in size; gradually increased to a present size of 2cm x 1.5 cm. medical history was negative. General and systemic examination was normal without any associated disorder, lymph nodes were normal on palpation. No significant findings were observed on extra-oral examination. Intra-oral examination showed a solitary pedunculated soft tissue growth in left posterior region of palatal mucosa since 1 month. [Fig. 1] Occasionally, the patient complained of discomfort while eating. It was 2cm×1.5 cm in size, oval in shape, smooth surfaced. The overlying skin was of same color as that of adjacent mucosa with yellowish tinge and was not associated with any secondary changes. No history of trauma, pus, blood discharge associated with growth. On palpation, the growth was mobile, non tender and soft in consistency with well defined margins. Based on history and clinical findings, a provisional diagnosis of Intra oral lipoma was made. Routine haematological investigations were done and all were found to be in normal limit. Surgical excision of growth was performed. Excisional biopsy specimen revealed a single soft tissue specimen, whitish yellow in color, 1.5 x 1 cm in size, oval in shape, soft in consistency with smooth surface texture [Fig. 2]. Hematoxylin and eosin (H and E) stained sections of the excisional biopsy specimen showed thin atrophic parakeratinized stratified squamous epithelium with flattening of rete pegs and underlying connective tissue stroma [Fig. 3]. The epithelium showed no features of dysplasia. The underlying connective tissue stroma was fibrocellular with adipocytes and hyalinization of collagen fibre bundles, moderate number of fibroblasts were seen along with mild to moderate chronic inflammatory cell infiltrate chiefly of lymphocytes [Fig. 4]. Histopathological examination showed mature adipocytes, with clear cytoplasm and eccentric nuclei [Fig. 5]. These features were consistent with a classical diagnosis of a lipoma. Hence the final diagnosis of intra oral lipoma of left palatal mucosa was made based on the clinical and histopathological findings. Post operative follow up was excellent without recurrence.

3. DISCUSSION

The lipoma is rarely seen intraorally with a prevalence rate of only 1/5,000 [3]. Lipomas are the most common soft tissue mesenchymal neoplasms, with 15–20% of cases involving the head and neck region and only 1–4% affecting the oral cavity. The etiology of lipoma is not exactly known but the obesity is considered as one of the most common factor [1]. Although its etiology is unknown, possible causes may include trauma, infection, chronic irritation and hormonal alterations. In few cases re-arrangement of chromosomes have been observed with respect to 12q, 13q, 6p [5]. Clinically it usually occurs in upper parts of the trunk, neck and arms. Generally no sex predilection and occurs in

patients older than 40 years. In oral cavity, it occurs on buccal mucosa and mucobuccal fold followed by tongue, floor of the mouth, lip and gingiva. Lipomas are slowly enlarging, with a soft, smooth-surface mass of submucosal tissues.



Fig. 1. Intraoral growth on left posterior palatal mucosa



Fig. 2. Showing gross specimen



Fig. 3. Scanner view showing parakeratinized stratified squamous epithelium with flattening of rete pegs and underlying connective tissue stroma (H&E stain, ×40)

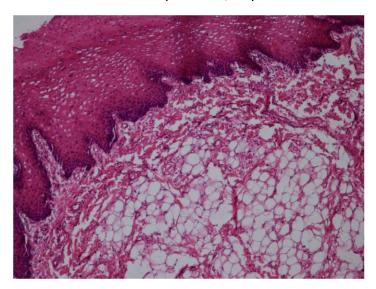


Fig. 4. Photomicrograph showing fibrocellular connective tissue stroma with adipocytes and hyalinization of collagen fibre bundles (H&E stain, ×100)

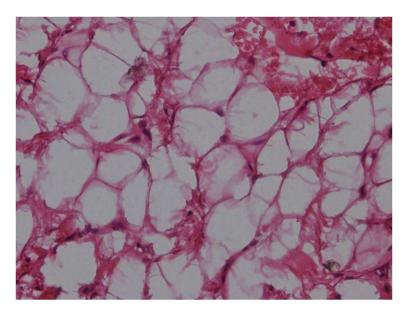


Fig. 5. Higher-power view showing empty adipocytes in connective tissue stroma (H&E stain, ×400)

The asymptomatic nature, slow progression, smooth surface, soft consistency with added yellowish color tinge over the surface alongwith its slippery nature on palpation helps the clinicians to differentiate lipoma from other palatal soft tissue swellings. It grows as round or ovoid mass in oral cavity usually less than 3 cm at time of diagnosis but increases up to 5-6 cm over period of years. Due to thinness of the overlying epithelium, yellow coloration of the fat can be seen [6]. Morphological it can be seen in different Types: Superficial – It appears as single or lobulated painless mass attached by sessile or pedunculated base. Yellow surface discoloration and well encapsulated. Surface epithelium is thin with superficial blood vessels visible. Diffuse lipoma -Affecting deeper tissues producing slight surface elevation. Fells like fluid on palpation mistaken for cyst. Occurs in the areas of more fat deposit. neurofibromatosis, Gardner syndrome, encephalocraniocutaneous lipomatosis, multiple familial lipomatosis and proteus syndrome are some of the syndromes associated with multiple lipoma [5]. The diagnosis of intraoral lipomas is usually clinical. Techniques like xeroradiography and echography are often used to delineate the anatomical extent of intraoral lesions but have limited capacity to precisely determine extent of lesion. While considering advanced investigations magnetic resonance imaging is the most sensitive investigation to study the soft tissue swellings and gives insight for the accurate diagnosis but the histopathological investigation with staining is the gold standard for the diagnosis of fatty tumor [7]. Histopathologically, Lipomas like fat, composed of mature fat cells, but the cells vary slightly in size, shape and are somewhat larger, measuring up to 200 mm in diameter. All lipomas are well vascularised, but under normal conditions, vascular network is compressed by

the distended lipocytes and is not clearly visible. The fibrous connective tissue, which is often hyalinized and may or may not be associated with the capsule or the fibrous septa are called fibrolipomas. Instead of microscopic variations the prognosis remains good [4]. The treatment of oral lipomas, including all the histological variants is simple surgical excision [2]. Liposuction is another option if the lipoma is soft and has a small connective tissue component. It results in less scarring; however, with large lipomas it may fail to remove entire tumor, which can lead to re-growth [8,9]. There are new methods to remove the lipomas without scarring. Intra-lesional injections of steroids and phosphatidylcholine are the effective means for the management of lipomas. Lipomas are not life threatening. And their transformation from benign to malignant is infrequent [10,11].

4. CONCLUSION

Clinicians should have awareness, that lipoma can occur in the oral cavity and able to identify intraoral lipomas to provide appropriate treatment. Surgical excision is the ideal treatment with excellent outcome; however complete resection should be done as this is the key factor to avoid recurrence.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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