



FIBROLIPOMA OF BUCCAL MUCOSA - A RARE HISTOLOGICAL ENTITY: A CASE REPORT

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ABSTRACT

Lipomas are rare benign soft tissue mesenchymal neoplasms in the oral cavity, representing 1% of all benign oral tumors. Fibrolipoma (FL), an uncommon, histological variant of the lipoma, mostly affects the buccal mucosa. Very few cases of FL have been reported in the English literature. The diagnosis and differentiation of FL with clinically similar lesions such as fibroma, mucocele and pleomorphic adenoma are very essential for a correct treatment plan and complete follow-up. Due to the rarity of oral cavity fibrolipoma reports, we present a case report of a young female patient diagnosed with a fibrolipoma in the buccal mucosa.

KEYWORDS : Adipose tissue, buccal mucosa, fibrolipoma, lipoma.

INTRODUCTION:

Adipocytosis a common benign neoplasm of the adipose tissue, but it has been considered as an unusual growth in the oral and oropharyngeal region. The first description of an oral lipoma was published by Roux in 1848 in a review of alveolar masses and he referred to it as a "yellow epulis"^[1]

The etiology of lipomas is uncertain and the tumor mainly affects the region of the trunk, shoulders, neck and axilla. Involvement of the oral cavity is rare with lipomas accounting for <4.4% of the benign oral tissue tumors.^[2] Oral lipomas can occur in various anatomic sites including the major salivary glands, buccal mucosa, lip, tongue, palate, vestibule, and floor of mouth. Although benign in nature, their progressive growth may cause interference with speech and mastication due to tumor's dimension.^[3]

Histologically, lipomas are classified as simple lipoma or variants such as fibrolipoma, spindle cell lipoma, intramuscular or infiltrating lipoma, angioliipoma, salivary gland lipoma (sialoliipoma), pleomorphic lipoma, myxoid and atypical lipomas.^[4,5] They are usually slow growing and rarely recur after surgical treatment. Hence, the prognosis of these benign tumors is considered good.^[6,7] Here, we present a case of fibrolipoma on buccal mucosa.

CASE REPORT:

A 35 year-old female patient reported with a chief complaint of a painless swelling in the right posterior region of buccal mucosa since 2 years. The swelling was asymptomatic and patient had not undergone any treatment for the same. Patient first noticed with swelling 2 years back which was small in size and slowly increased to the present size. There was no other relevant medical history.

Intra-oral examination revealed a pedunculated slow growing swelling measuring 2cm x 2cm in size, round in shape; surface was smooth and shiny with well-defined borders seen on buccal mucosa along the occlusal plane since past two years [Figure 1]. Swelling was asymptomatic, without any surface ulceration. On palpation, the swelling was soft, non-tender, mobile, and the margins were slippery under the palpating finger. A clinical diagnosis of lipoma/benign salivary tumor/fibroma were made.

Routine blood examination was found to be normal. The lesion was excised under local anesthesia and the excised tissue was sent for

histopathological examination to the Department of Oral Pathology. Macroscopic examination revealed one soft tissue of creamish white color, soft in consistency, smooth surface and measuring 1.8 cm x 1 cm x 1.8 cm [Figure 2]. The gross specimen was not floating in water.

Microscopic findings revealed the connective tissue stroma consisting of dense collagen fibers bundles intermixed with lobules of mature adipocytes with no cellular atypia. Plump fibroblast are interspersed in between areas of adipose tissue. Few endothelial lined blood vessels are also noted. The overlying epithelium was 6 to 8 layers thick, atrophic, parakeratinized and stratified squamous type [Figure 3]. Correlating with the clinical and with histopathological examinations, the above lesion was suggestive of fibro-lipoma.

DISCUSSION:

Lipomas are the most common benign mesenchymal tumors developing in any location where fat is normally present, but its presence in the oral and oropharyngeal region is relatively uncommon with a prevalence rate of only 1/5000 adults.^[8] They develop mostly in the subcutaneous tissues but also could develop in deeper tissues.^[9] Fibrolipoma is a microscopic variant of lipoma characterized by a significant fibrous component intermixed with lobules of fat cells.^[10] The consistency of this lesion varies from soft to firm, depending on the quantity and distribution of fibrous tissue and the depth of the tumor.^[10] The tumor has been reported to be more frequent in the buccal mucosa and buccal vestibule, and it also shows a slight predominance in females.^[11,12] In our case, the intraoral site affected was also buccal mucosa.

The English literature review showed a variable distribution of these intraoral lipomas but approximately half were related to the cheek and the remaining were found in the tongue, floor of the mouth, lips, palate and gingiva. Generally, oral lipomas have been reported to occur in all ages but are frequently seen after 40 years of age.^[10]

Lipomas are usually soft, well circumscribed, mobile, slow growing, and asymptomatic.^[11] In 2004, Zhong et al published the following findings; lipomas of the oral and maxillofacial region occur most commonly in adult males in the parotid region, followed closely by the buccal mucosa. The tumor has been reported to be more frequent in the buccal mucosa and buccal vestibule, and it also shows a slight predominance in females. These tumors are

uncommon in children. Interestingly, spindle cell lipomas are common in this region and comprise the majority of parotid and lip tumors in the study. Angiolipomas were absent in this anatomic region in this study.^[13] Multiple head and neck lipomas have been observed in neurofibromatosis, Gardner syndrome, Cephalocrani ocutaneous lipomatosis, multiple familial lipomatosis and Proteus syndrome.^[13]

The etiology varies from the differentiation of multipotent mesenchymal cells in fat tissue, cartilage, and bone to metaplasia of a preexisting lipoma. Mesenchymal cells are modified by systemic and local influences that range from local trauma to prolonged ischemia.^[14] Hum Kim et al studied ten ordinary lipomas and one fibroblastic lipoma under the light and electron microscope respectively. They observed that ordinary lipomas contained only a few inconspicuous septa, were composed of univacuolar mature adipocytes. No young forms of adipocytic differentiation were seen reflecting the slow growth of the ordinary lipomas.^[15]

The proliferative activity of FL revealed a greater proliferative rate than other simple variants which indicates the need for accurate diagnosis of such variants with high proliferative activity and further encourages similar studies.^[16] Furthermore liposarcoma of the oral cavity is exceedingly rare, but this entity cannot be distinguished from its benign counterpart at clinical examination. Therefore, accurate histological examination is mandatory, and the differential diagnosis is based on the detection of a lack of lobular architecture, areas of prominent fibrosis and, most importantly, on the presence of multivacuolated adipose cells with indented nuclei (lipoblasts), which are typically present in liposarcoma in variable proportions.^[9]

The treatment of lipomas including fibrolipoma is usually surgical excision. This tumor can be life threatening due to obstruction of upper airway by virtue of its size as sudden asphyxia death has been reported in a case of esophageal fibrolipoma.^[17]

The lesion in our case was surgically excised without any complications. Post-operative follow-up of 1 year showed no recurrence of the case.

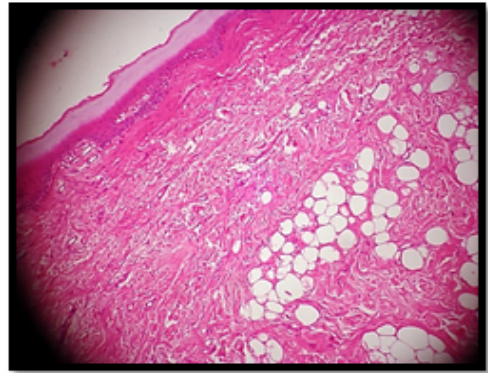


Figure 3: Histologic appearance of fibrolipoma H & E x10

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Figure 1: Showing fibrolipoma of right buccal mucosa



Figure 2: Excised lesion