Fibrolipoma of buccal mucosa

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Abstract

The lipoma is a very common benign tumor of adipose tissue, but its presence in the oral and oropharyngeal region is relatively uncommon. Fibrolipoma, a histological variant of lipoma, mostly affect the buccal mucosa and causes functional and cosmetic disabilities. Hence, accurate histopathological examination of lipomas is important for a correct treatment plan. This article describes a case of 10 year old girl with fibrolipoma of the buccal mucosa with a relevant review of tumors.

Keywords: Buccal mucosa, fibrolipoma, oral cavity

Introduction

Lipomas are the most common benign mesenchymal tumors developing in any location where fat is normally present. They develop mostly in the subcutaneous tissues but also could develop in deeper tissues.^[1] The etiology of lipomas is uncertain and the tumors mainly affect the region of the trunk, shoulders, neck, and axilla. Involvement of the oral cavity is rare, with lipomas corresponding to less than 4.4% of all benign oral soft tissue tumors.^[2] They commonly present as slow-growing asymptomatic lesions with a characteristic yellow color and soft, doughy feel in the buccal mucosa, floor of the mouth and tongue in the fourth and fifth decades, and generally with no gender predilection. 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]

Case Report

A 10-year-old female patient reported with a chief complaint of swelling on left cheek. The swelling was first noticed

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two years ago, which showed slow continuous gradual enlargement. The patient had no difficulty in mastication, speech, and deglutition. Intraoral examination revealed a pinkish, well-defined oval swelling measuring 2.5 x 3 cm present in the left buccal mucosa [Figure 1]. On palpation, the swelling was soft, fluctuant, non-tender, mobile, and the margins were slippery under the palpating finger. A provisional diagnosis of intraoral lipoma was established. Routine blood examination was found to be normal. The lesion was excised under local anesthesia and the excised tissue was sent for histopathological examination [Figures 2 and 3].

Microscopic examination revealed adipose tissue with compressed blood vessels embedded within dense collagen fibers. Proliferating fibroblasts were evident in the connective tissue stroma. The overlying epithelium was 8 to 10 layers thick, atrophic, parakeratinized and stratified squamous type. Correlating with the clinical and histopathological examination, the excised lesion was suggestive of fibrolipoma [Figure 4]. The postoperative course was uneventful. No recurrence of the lesion has been observed [Figure 5].



Figure 1: Showing fibrolipoma of left buccal mucosa



Figure 2: Excised lesion



Figure 4: Histologic appearance of fibrolipoma [H & E, ×10]

Discussion

The first description of oral lipoma was provided in 1848 by Roux in a review of alveolar masses which he referred it as a "yellow epulis".^[4] The lipoma is a very common benign tumor of adipose tissue, but its presence in the oral and oropharyngeal region is relatively uncommon with a prevalence rate of only 1/5000 adults.^[5] Fibrolipoma is a microscopic variant of lipoma characterized by a significant fibrous component intermixed with lobules of fat cells.^[6] 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.^[4] 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.^[7,8] In our case, the intraoral site affected was also buccal mucosa. In 2003, Fregnani et al. collected several cases and diagnosed 45.7% cases as lipomas and 39.1% cases as fibrolipomas.^[9] No consensus exists regarding the pathogenesis of oral lipomas. Hereditary, fatty degeneration, hormonal basis, trauma, infection, infarction, and chronic irritation are probable representative theories to elucidate the pattern of a lipoma.^[2] A number of microscopic variants have been described. The most common of these is the



Figure 3: Buccal mucosa after surgical resection of the lesion



Figure 5: Postoperative healing of buccal mucosa

fibrolipoma, characterized by a significant fibrous component intermixed with the lobules of fat cells. The angiolipoma consists of an admixture of mature fat and numerous small blood vessels. Myxoid lipoma exhibits a mucoid background and may be confused with myxoid liposarcomas. The spindle cell lipoma is another variant that demonstrates variable amount of uniform appearing spindle cells in conjunction with a more typical lipomatous component. Pleomorphic lipomas are characterized by presence of spindle cells and bizarre hyperchromatic giant cells. Intramuscular lipomas are often more deeply situated and have an infiltrative growth pattern that extends between skeletal muscle bundles.^[6]

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.^[7] Lesions outside the oral cavity could show greater recurrence rates after surgical excision, but intraoral intramuscular lipomas, although not well-limited, rarely show recurrence if completely excised.^[9]

Conclusion

Lipomas found in the oral and maxillofacial region are usually slow-growing lesions. The clinical course is usually asymptomatic until they get larger in size. Most of lipomas develop in the subcutaneous tissues but deeper tissues may be involved as well. The knowledge and prompt treatment of tumors in this region is important. The complete resection should be emphasized, which is the key factor to avoid recurrence.

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