Angiolipoma of Lip - Case Report of A Rare Lesion

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Abstract:

Lipoma is a relatively rare intraoral tumor, although it occurs with considerable frequency in other areas, particularly in the subcutaneous tissue of the neck. Angiolipoma is a variant of lipoma with a prominent vascular component. We describe a rare case of diffuse swelling of the lower lip in an 18 year old female patient diagnosed histopathologically as angiolipoma.

Keywords: Diffuse swelling, Angiolipoma, Lip

INTRODUCTION

Lipoma is the most common benign mesenchymal tumor developing at any site where adipose tissue is present. It mainly occurs in subcutaneous tissue but can also be present in deeper regions. Peak occurrence is in the fifth or sixth decade of life and the tumor is uncommon in childhood. 15% to 20% of these tumors occur in the Head & Neck region, with 1 to 5% affecting the oral cavity & representing 01 to 05% of all benign tumors of the mouth.

This article describes a rare case of diffuse swelling of lower lip in an 18 yrs old female patient diagnosed as Angiolipoma.

CASE REPORT

An 18yrs old female patient reported to the Department of Oral Medicine & Radiology with chief complaint of missing teeth in the upper front tooth region since 2yrs. On examination an asymptomatic diffuse swelling involving the entire lower lip was noted. The patient gave a history of swelling for the past 3-4 years. The swelling was soft in consistency, without pitting and asymptomatic upon palpation. The patient was advised for the treatment of the swelling. The patient was referred to the department of oral surgery for excision of the swelling. The excised tissue was fixed in neutral buffered formalin & sent for histopathological examination. The H & E stained section revealed adipose cells without fibrous septa traversing the adipocytes along with hyperplastic epithelium (Fig-1), and adipocytes along with blood vessels in dense fibrous connective tissue (Fig-2). A diagnosis of angiolipoma was made. The patient was followed up without post surgical complication and her missing teeth replaced.

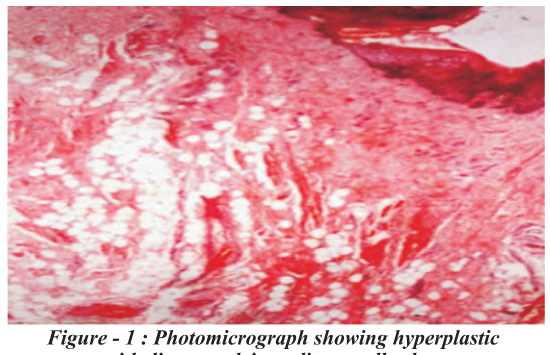

Figure - 1 : Photomicrograph showing hyperplastic epithelium overlying adipose cells along with variable sized blood vessels. (H& E, x 100).

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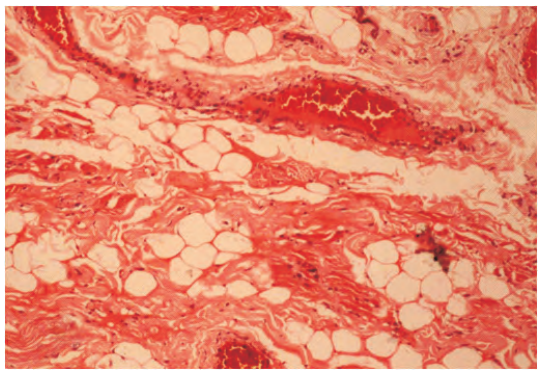

Figure - 2 : Photomicrograph showing adipocytes along with blood vessels in dense fibrous connective tissue. (H& E, x 400).

Lipomas develop in any location where fat is normally present, but actually uncommon in oral & maxillofacial region. Lipomas of the oral and maxillofacial region are slow growing neoplasms as in other parts of the body. They mostly develop in one site and 5% are multiple[2]. Chromosomal investigations have reported breakpoint involving 12q in chromosomal rearrangement. The study demonstrated breakpoint to band 12q 13 and 12q 14[3]. The lipoma in the maxillofacial region has been reported in the parotid, buccal mucosa, tongue, palate, floor of the mouth and rarely lip[4]. Morphologically intraoral lipomas can be classified as a diffuse form affecting the deeper tissue and a superficial and encapsulated form[5]. Our case exhibited a diffuse form. These diffuse forms which are usually seen in deeper tissue are simply an overabundance of the tissue. On the contrary our case presented as a diffuse swelling of the lower lip which could be noted clinically. Angiolipomas are benign mesenchymal tumor made up of mature lipocytes. These tumors were originally described by Howard and Helwig in 1960[6]. These are benign subcutaneous lesions most common in young male patients in contrast to our case which occurred in a female patient. Only 38 cases of angiolipoma have been reported. Only two cases of angiolipoma of the lip have been reported.

Pathogenesis of lesion remain unclear. Many suggest trauma as a possible etiological factor. But the origin of pseudoangiolipoma is still controvercial[1, 7-8]. Different theories state that a lipoma differentiates because of some unknown stimulus. Possible causes include fatty metaplasia of central haemangioma, hyperplasia of fat with an associated increase in vascular channels or a true neoplasm. There is support for the theory that angiolipoma originates as a congenital lipoma which latter undergoes vascular proliferation. Howard and Helwing think that embryonic sequestration of multipotential cells become activated at puberty by hormones and differentiate into simple lipoma. Further stimulus such as trauma can cause vascular infiltration of the lesion, but trauma is not present in many cases. In our case trauma was not noted which goes in accordance with the literature.

Histologically lipomas are difficult to distinguish from normal adipose tissue. Cells of lipoma differ metabolically from that of normal fat cells even though they are histologically similar. Hence diagnosis of the tumor is essential. Thus a person on starvation diet will lose fat from the normal fat deposits in the body but not from lipoma. Furthermore fatty acid precursors are incorporated at more rapid rate into lipoma fat than the normal fat while lipoprotein lipase activity is reduced. We also noted epithelial hyperplasia as a change due to long standing nature of the lesion. Early diagnosis of lipoma is necessary which goes in accordance with the literature that lipomas should not be left untreated. Lipomas must be well diagnosed and excised surgically as long standing cases have shown malignant transformation. Diffuse swelling of

the lip must also include lipoma in the differential diagnosis. Histological lipomas & its variants must be differentiated. Varying amount of blood vessels, fibrous septa and fat cells are seen. Angiopseudolipomas can de differentiated from angiolipoma by the absence of fibrous septa traversing the adipocytes are rare and these lesions occurring as a diffuse swelling is even rarer.

CONCLUSION

Though lipoma accounts for 0.1 to 0.5 % of all benign tumors of the mouth, its presentation as a diffuse swelling of lower lip diagnosis angiolipomas is rare.

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