INTRODUCTION

Leiomyomas are benign soft tissue neoplasms that arise from smooth muscles. Three distinctive patterns of leiomyoma have been described in literature; piloleiomyomas, angioleiomyomas and genital leiomyomas.1

Leiomyomas of oral cavity are very rare and accounts only for 0.4% of soft tissue neoplasms and 0.06% of all leiomyomas.2 WHO defines angioleiomyoma as 'A frequently painful, benign subcutaneous or deep dermal tumor composed of well differentiated smooth muscle cells arranged around vascular channels.'3

Angioleiomyomas originate from tunica media of blood vessels, mainly the veins.3 Oral angioleiomyomas originate from vascular smooth muscles, excretory duct of salivary glands and also from the circumvallate papillae.4 The exact etiology of angioleiomyoma is unknown. However, local infection, trauma and artero-venous malformation and hormonal influences have been proposed as possible etiologic factors.5

This report describes the rare tumor presenting as a gingival growth.

CASE REPORT

A 39-year male reported to the department of oral medicine and radiology with the chief complaint of growth on his lower left front region of the jaw for 15 days. The growth was asymptomatic without any discharge and was not associated with any systemic changes.

Intra oral examination revealed a solitary, lobulated, sessile pink mass with red patches measuring 3 x 3 cm extending from mandibular left central incisor to mandibular left canine (Figure 1a). Intra oral periapical radiograph revealed a localized loss of lamina dura in relation to left mandibular central incisor, lateral incisor, and canine (Figure 1b). On the basis of clinical features, provisional diagnosis of pyogenic granuloma was given. Surgical excision of the lesion was performed under local anesthesia and excised tissue sent to the department of oral and maxillofacial pathology for the histopathological examination.

The hematoxylin and eosin stained soft tissue section revealed circumscribed mass made up of fassicles of spindle shaped cells having cigar shaped nuclei, with multiple torturous blood vessels with thickened walls showing hyperplasia (Figure 2a). The intervening bundles of smooth muscles are seen between the vessels with chronic inflammatory cells chiefly lymphocytes and plasma cells (Figure 2b).

On the basis of histopathological finding, final diagnosis of angioleiomyoma was given. Follow-up period of 6 months was uneventful.
DISCUSSION

Angioleiomyoma is a benign tumor originating in the smooth muscle tissue from the tunica media. It usually presents in the subcutaneous region of the extremities and is rare in the oral cavity.\(^1,^2\) Oral angioleiomyomas occur in the age range of 35 - 85 years with a mean of 50 - 55 years. Female predilection has been observed with 2:1 female to male ratio. Intra orally, the most frequent site of occurrence is the lip, especially the lower lip, followed by the buccal mucosa and tongue.\(^2,^5,^6\) Gingiva is extremely rare site of occurrence and accounts only for 0.9% of angioleiomyomas. The present case was found on gingiva which makes it a rare case.

Oral mucosal angioleiomyomas characteristically range in size from 2 mm to 10 mm. They usually present as small, round or elevated sessile, normal colored nodules that vary in firmness.\(^2,^6\) Histologically, angioleiomyomas contain dilated vascular spaces with an endothelial cell lining and smooth muscle bundles arranged in a more concentric fashion.\(^2,^4\) The smooth muscle tumor cells are generally well-differentiated cigar shaped cells with blunt ends. Immunohistochemically, the tumor cells are positive for α-smooth muscle actin, vimentin and desmin. Simple surgical excision along the tumor margin or capsule is always the treatment of choice. Wide excision with significant margin is usually not necessary.\(^1,^4\) Oral angioleiomyomas are benign smooth muscle tumors. Because of the rare occurrence, careful differentiation of these lesions from malignant tumors like leiomyosarcoma is necessary before treatment. In this patient, excision led to uneventful recovery and follow-up.

REFERENCES