INTRODUCTION

Leiomyoma are benign smooth muscle neoplasm that are classified according to the World Health Organization (WHO), under three histological subtypes: solid leiomyoma, angioleiomyoma (vascular leiomyoma) and epithelioid leiomyoma (bizarre leiomyoma); the last subtype is the least common.1

Solid leiomyoma are typically normal in colour and well circumscribed tumours that consist of interlacing bundles of spindle-shaped smooth muscle cells with elongated, pale staining and blunt-ended nuclei. Mitotic figures are uncommon in them.

Oral leiomyomas are infrequently found. Less than 150 cases have been published since Blanc's report in 1884.2 In a series of 7748 smooth muscle tumours of all types, only 5 (0.06%) were found in the oral cavity.3 Angioleiomyomas represent 64 - 66% of all variants of oral leiomyomas, followed by solid ones.4,5 When encountered, they most often occur in tongue, palate (hard or soft), buccal mucosa, lip and rarely mandibular trigone.4,6

This report describes an extremely rare case of leiomyoma of the retromolar region in a 10-year child.

CASE REPORT

A 10 years girl reported to the dental OPD of Abbasi Shaheed Hospital with the chief complaint of painful gingival swelling of one month duration, distal to mandibular right first molar which was gradually increasing in size. Past medical history was unremarkable. The patient appeared to be well with history of no prior hospitalization or major illnesses. The family history was non-contributory. On extra oral examination, slight swelling was seen on the right side of mandibular angle area with the overlying skin being normal. On intra oral examination (Figure 1) a non-fluctuant, non-suppurative, slightly ulcerated gingival mass, extending in retromolar region. The mass measured 3 x 1.5 cm approx.

Permanent mandibular right first molar were grade-II mobile. No anaesthesia/paresthesia of lip was present. No palpable cervical lymph nodes were found. An orthopantogram (Figure 2) of the patient was taken which revealed no dental cause for the lesion but a radiolucent shadow of the soft tissue growth with erosion of bone in second molar and retromolar region.

In view of the isolated, non-fluctuant nature of the mass, a provisional diagnosis of pyogenic granuloma, fibroma or giant cell granuloma was made. Therefore, after making routine blood investigations and taking pre-anesthetic clearance, the patient was appointed for surgical excision of the mass under general anaesthesia. The treatment is surgical excision. We report a 10-year girl child, with a lump in the right retromolar trigone region intraorally. Excisional biopsy performed under general anaesthesia revealed the specimen to be a leiomyoma. The low incidence of this pathology, the age of the patient and the location are unusual.

Key Words: Leiomyoma. Oral cavity. Oral tumour.
Macroscopically, the excised mass was brownish white in colour and irregular in shape. The histological report revealed polypoid round and oval tissue partly covered by stratified squamous epithelium (oral mucosa). The tissues were composed of closely packed bundles of smooth muscles fibres arranged in whorl pattern. No granuloma, dysplasia or malignancy was seen.

Immunohistochemical stain was done and showed Smooth Muscle Actin (SMA) positivity which was suggestive of leiomyoma. Postsurgical recovery of the patient was uneventful. Sutures were removed after 7 days.

**DISCUSSION**

Leiomyoma is a benign tumour of smooth muscle. Leiomyomas are uncommon in the oral cavity because of paucity of smooth muscles in the mouth. Stout suggested that the source of smooth muscle in oral cavity can be tunica media of the blood vessel wall, whereas Glass considered the smooth muscle of lingual ducts and suggested the circumvallate papillae as another possible source. Oral leiomyomas can appear at any age, but the greatest prevalence is in the age group of 40 - 59 years, more frequent in men than in women with a 1.43:1 ratio.

Clinically, leiomyomas are non-specific masses, with several aspects from normal to more congestive mucosa, according to their vascularity. These are usually well-defined, slow growing, asymptomatic masses. Some symptoms are induced by local growth. Deglutition difficulty, toothache, loose teeth, or pain referred in TMJ have been reported. Shortness of breath can be produced by huge tumours. Pain is suspected to be prompted by local ischemia due to tumoral vessel contraction, and due to neural irritation near the tumour.

There are not known risk factors related with this kind of tumour. In this case, there appears to be no relation between semi-erupted teeth and local tissue damage and the leiomyoma.

Several oral tumours should be included in the differential diagnosis, benign lesions such as fibroma, neurofibroma, lipoma or mucocele or malignant ones such as leiomyosarcoma.

Histological studies are necessary to achieve differential diagnosis. The definitive diagnosis in leiomyoma is the histological one. Typical smooth muscle cell proliferation (small and spindle) is observed without necrosis areas or mitotic figures. The malignant counterpart: the leiomyosarcoma should be taken into account when the number of mitotic figures per field is over ten. Differentiation between leiomyoma and low grade leiomyosarcoma is not always easy.

Histologically three types of leiomyomas can be differentiated: solid leiomyoma (25%), vascular leiomyoma or angiomyoma (74%) and leioblastoma or epithelioid leiomyoma (1%).

Hematoxylin and eosin stains can be used in this kind of tumour. Special stains such as Masson’s trichrome, Van Gieson’s stain, or Mallory’s phosphotungstic acid (PTAH) are specific for muscle cells and collagen fibres, immunohistochemical detection of actin (smooth muscle marker) can also be useful.

Wide surgical resection is the only reported treatment in reviewed literature with successful results. Recurrence rate is very low if complete resection is achieved. It has been reported in a case 2 weeks after surgery, probably due to incomplete resection.

**REFERENCES**


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Oral leiomyoma in retromolar trigone

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