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Leiomyoma of face: An unusual presentation: A case report

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Abstract

Leiomyoma is a rare tumor of smooth muscle origin with very low incidence in the Head and Neck region. Oral cavity is devoid of smooth muscles except in blood vessel wall thus this tumor is quiet rare in oral and maxillofacial region with reported incidence of 0.065%. These accounts for 0.42% of all soft-tissue neoplasm in the oral cavity. We are presenting a case of large Leiomyoma of left buccal mucosa which was treated by surgical excision in toto and reconstruction was done by Anterolateral Thigh flap.

Keywords: Leiomyoma, soft tissue swelling, anterolateral thigh flap, free flap

Introduction

Leiomyoma was first described by Virchow in 1854. Leiomyoma is defined by WHO as circumscribed benign, often cutaneous tumor composed of intersecting bundles of mature smooth muscle cells ^[1]. Leiomyoma is a smooth muscle benign tumor that can appear at any location, the most frequent site being the female genital tract followed by gastrointestinal tract and skin ^[2]. Facial presentation is extremely rare, incidence below 1% being reason that this region lacks smooth muscles. Stout suggested that the origin of smooth muscles in the oral cavity and face is the tunica media of the blood vessels wall ^[3]. Glass had a different theory he suggested that smooth muscles of the ductus lingualis and circumvallate papillae are common source ^[4]. Most authors believe that the leiomyoma of face originates from smooth muscle present in the mesenchyme of salivary gland and the duct of the salivary gland but some authors believe that undifferentiated mesenchymal cells present in face are responsible for the same ^[1]. Leiomyoma is divided into three types by world health organization: leiomyoma (solid), angioliomyoma (vascular leiomyoma) and epithelioid leiomyoma (Leiomyoblastoma) ^[5]. Leiomyoma of face and oral cavity is most frequently found in third to fifth decade of life. Females being more commonly affected with male to female ratio of 1:2.5, lip, tongue, cheek, palate, gingiva and mandible is the most frequent site affected in face and oral cavity ^[6].

Case report

A 30 year old male patient reported to Regional Cancer Center, Raipur, with a chief complaint of huge painless swelling in left side of the face since 3yrs which is slowly increasing in size. On clinical examination a well circumscribed unilobular swelling measuring 10 x 8 cm was noted in left side of the face. Swelling was extending from lateral canthus to the lower border of the mandible superoinferiorly, and from ale of the nose to tragus of the ear anterioposteriorly. Swelling was soft to firm in consistency on palpation. No ulcer, sinus or any other pathology was seen with the involved skin. Facial nerve function was checked which revealed normal function. There was no associated pain and tenderness and no evidence of regional lymphadenopathy. Intraoral mucosa appeared normal with no sign of any pathology and patency of stensons duct established with flow of saliva.

CT scan was performed and it revealed a large homogenously enhancing mixed density lesion with no calcification and necrosis. Incision biopsy revealed lesion as well circumscribed and constituted numerous spindle cells suggestive of smooth muscle cells, arranged in bands with intervening numerous blood vessels, cells had uniform and monochromatic nucleus which

confirmed the diagnosis of Leiomyoma.

Lesion was removed in to under general anesthesia with adequate margin. Master was superficially shaved and facial nerve was preserved. Reconstruction was done using Anterolateral thigh (ALT) flap harvested from the right thigh which is based on descending branch of lateral circumflex femoral artery. Anastomosis was done with the facial artery and vein. Post-operative course was uneventful with complete flap take-up. Patient is still under regular follow-up and there is no sign of reoccurrence till date.

Discussion

Leiomyoma is the most common benign neoplasm of the uterus but rare in facial region because of paucity of smooth muscle tissue in Head and Neck region [5]. Majority of the cases reported were painless slow growing asymptomatic mass, firm consistency and color of the lesion varies from white to reddish brown depending on the duration, depth and vascularity. Occasional cases with epistaxis, nasal obstruction, headache and facial pain have been reported [1].

Clinically it is very difficult to label the lesion as leiomyoma because of the fact that that lesion is asymptomatic and also it shares clinical characteristics similar to other mesenchymal tumors like fibroma, neurofibroma, lipoma, mucocele or Leiomyosarcoma its malignant counterpart, therefore a definitive diagnosis is mainly determined by histological study [6]. First option for treatment in benign smooth muscle tumors appears to be an excisional biopsy or en bloc resection with wide margin depending on the size of tumor. Other treatment like enucleation and cryosurgery has been tried but the result obtained was no match to the traditional surgical resection [8].

The introduction of microvascular free tissue transfers has broadened the options in head and neck reconstruction. The versatility of the anterolateral thigh free flap allows it to be raised as a subcutaneous, musculocutaneous, fasciocutaneous, or adipofascial flap. Free tissue transfer techniques for the reconstruction of soft tissue defects have provided reliable reconstruction for nearly 20 years. Although a variety of flaps are available, the anterolateral thigh (ALT) flap based on the musculocutaneous and septocutaneous perforators is an excellent

soft-tissue flap for reconstruction of a full or partial thickness defect of the buccal area [9].



Fig 1: Preoperative photograph of leiomyoma on left facial region



Fig 2: Intraoperative photograph depicting excision of lesion with adequate margin



Fig 3: Post-operative photograph with healing

Conclusion

Leiomyomas are rare lesions and there is limited literature on its clinicopathologic features. As in our patient, large leiomyoma confined to the cheek are an unusual clinical presentation.

Surgical excision of leiomyomas can be performed, but the recurrence rate is high, particularly in patients with multiple lesions. In some cases, cryotherapy, electrotherapy, and carbon dioxide laser ablation therapy have resulted in recurrence.

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