

*Case Report*

A Rare Case of Intraoral Acquired Hemangioma

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ABSTRACT

Hemangiomas are well-known benign lesions of the oral cavity and can cause esthetic and functional impairment, depending on location. Hemangiomas in the oral cavity are always of clinical importance to the dental profession and require appropriate clinical management. Treatment is primarily dependent on diagnosis of the lesion and on its location. Here we report a case of acquired hemangioma in the maxillary anterior region. Surgical excision of the lesion was done under local anesthesia by using monopolar cautery.

Key Words: Oral mucosa, Capillary Hemangioma, Electrocautery.

INTRODUCTION

Hemangiomas are well-known benign lesions of the oral cavity. [1] Hemangiomas of the head and neck are common; these tumors are rarely seen in the oral cavity, especially in the oral soft tissue. [2] Therefore, they are not commonly encountered by dental professionals. [3] The incidence is high in females (65%) than males (35%). [4] Mulliken and Glowacki et al described a classification which is presently accepted. Hemangioma is further sub classified based on their histological appearance: (1) capillary lesions (2) cavernous lesions and (3) mixed lesions. [5] Clinically hemangiomas appear as soft, sessile or pedunculated, and painless, smooth or irregularly surface. The color varies from deep red to purple and the tumor blanches on application of pressure. Majority of hemangioma is congenital, but

some are acquired later in life. Some of the acquired capillary hemangioma of the oral cavity may develop from inflammatory hyperplasia lesion mostly on the gingiva. [6]

CASE REPORT

A 45-year-old female reported to department of Oral Medicine & Radiology with the chief complaint of Swelling and bleeding from the upper front teeth region since 1 month. Swelling was gradually and constantly increasing in size to reach the present size. Patient had under gone extraction in the same region 1month back due to the loose teeth in the front tooth region. The dentist allegedly extracted the teeth and routine instructions were given. The patient returned back to the same clinic where the dentist noticed a small nodular growth in the anterior maxillary alveolus which bleeds profusely on gentle

manipulation. The clinician tried to arrest the bleeding with a red hot heated instrument and was unable to get homeostasis and thus referred the patient to a higher center. Patient medical and personal history was not significant. No history of similar or any other disease in other family members. Patient was moderately built and nourished and vital signs were normal. On intraoral examination 11, 12, 13, 21, 22, 23 were missing. A solitary sessile spherical shaped reddish growth with distinct border and granular surface is noted on the alveolar mucosa in relation to 11, measuring about 1x1cm antero posteriorly and superio inferiorly. Apart from confirming the inspectory findings, the swelling was soft to firm in consistency, non tender and bleeds on palpation. [Fig: 1]



Fig: 1: solitary sessile spherical shaped reddish growth seen on anterior maxillary region

Differential diagnosis of Epulis granulomatosum, Hemangioma, Peripheral giant cell granuloma, Peripheral ossifying fibroma, Kaposi sarcoma was considered. On aspiration with a wide needle on the edge of the lesion bright red blood was aspirated with the puncture wound showing a pulsatile bleeding give rise to a suspicion of a possible vascular lesion with a feeder vessel. Maxillary Anterior occlusal

radiograph which shows no significant findings were noted on occlusal radiograph. [Fig 2] Hemoglobin was only 7mg%.



Fig 2: Maxillary anterior occlusal radiograph shows no bony pathology

Surgical excision of the lesion was done under aseptic condition the area was anesthetized and marked with a wide bore need to partially identify the mucosal extent of the lesion. The tumor was surgically enucleated along with the overlying mucosa with a 5mm clear margin with a monopolar cautery. The lesion seemed to be associated with attachment to the anterior alveolus; alveolectomy of about 15 mm was performed to remove any nidus of the lesion which might lead to recurrence. [Fig: 3]



Fig: 3: During surgical excision with electrocautery

The excised lesion was transported in 10% formalin to the laboratory for histopathological examination section showed ulcerated stratified squamous

epithelium, underlying tissue shows proliferating small capillaries lined by benign endothelial cells suggestive of “CAPILLARY HEMANGIOMA” [Fig :4]

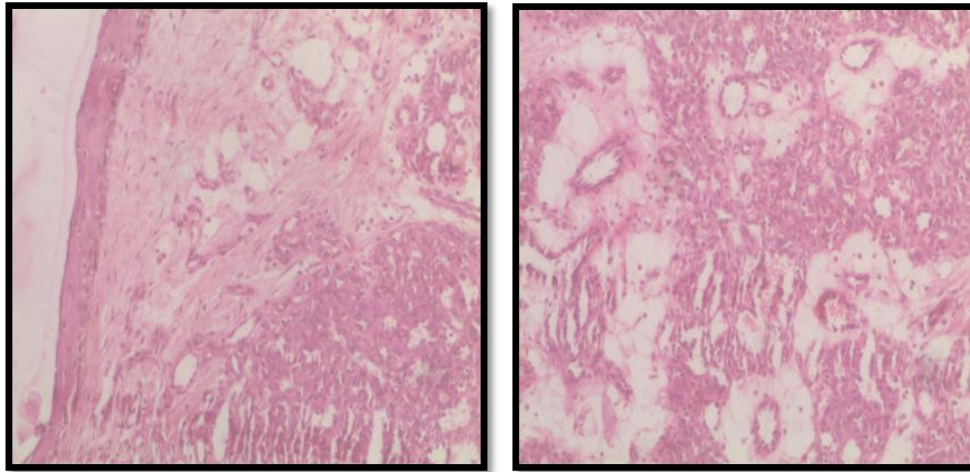


Fig: 4: Histological images

On the basis of history, clinical examination, and investigatory finding a final diagnosis of Acquired Capillary Hemangioma was made. Lesion had completely healed after one month follow up. [Fig: 5]

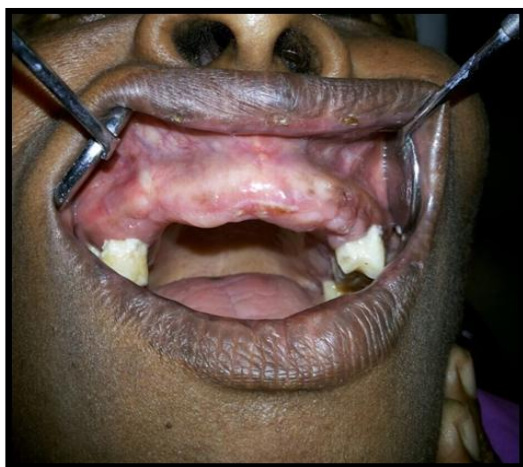


Fig: 5: post operative image after one month

DISCUSSION

Hemangioma in Greek: Haima-blood; angeion vessel, oma - tumor. It is also called as “A benign tumor of dilated blood vessels” and is often congenital in origin. Hemangiomas comprise 7% of all

benign tumors in infancy and childhood. About 85% of childhood onset hemangiomas spontaneously regress after puberty, where in older individuals, once formed, it does not regress. [7] Capillary hemangiomas have a 3:1 female to male ratio. Capillary hemangioma may occur in the oral and maxillofacial region including gingiva, palatal mucosa, lips, jawbone, and salivary glands. Apart from the oral cavity, hemangioma develops at other sites such as cheek and eyelid. Vascular malformations are localized or diffuse errors of embryonic development and it has also been hypothesized that angiogenesis likely plays an important role in the vascular excess present in these lesion. Cytokines, such as growth factor, basic fibroblast and vascular endothelial growth factor are known to stimulate angiogenesis. Excesses of these angiogenic factors or decrease of angiogenesis inhibitors (e.g., gamma-interferon, tumor necrosis factor-beta, transforming growth factor-beta) have been concerned in the development of hemangiomas. [8] Majority of hemangioma is

congenital, but some are acquired later in life. Some of the acquired capillary hemangioma of the oral cavity may develop from inflammatory hyperplasia lesion mostly on the gingiva. The condition may be right for certain inflammatory hyperplasia lesion with many patent capillaries to develop significant blood flow during the inflammatory stage. Such capillary system remains after the irritant has been eliminated and the inflammation subsides. The resultant lesion is usually nodular and bluish red, usually bleeds easily, and may blanch on pressure. Microscopically, the capillary hemangioma is comprised of numerous intertwined capillary sized vessels lined by endothelial cells and usually filled with blood. ^[9] Concerning the treatment, most true hemangiomas require no intervention; they undergo spontaneous regression at an early age. Merely 10-20% requires treatment because of their size, location or their behavior (Mullikan 1995). Even though different therapeutic procedures including microembolization, cryotherapy, sclerosing agents, radiation, corticosteroids and, recently, laser therapy have been reported, complete surgical excision of these lesions, if possible, offers the best chance of cure. ^[10] In the present case, the treatment comprised of complete surgical excision of the lesion. The prognosis of hemangioma, in general, is excellent while it does not tend to recur or undergo malignant transformation following adequate treatment. In the case presented here, the patient was recalled at regular intervals and no sign of recurrence was reported till 6 month follow-up.

CONCLUSION

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Lesions which are thought to be inflammatory in origin should be thoroughly evaluated so that vascular lesions when undiagnosed could lead to troublesome bleeding with recurrence on surgical removal.

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