

A case report: Hemangioma on inner cheek lining of buccal mucosa in a 63-year-old male

*Corresponding Author(s): Sajjad Baber, BDS/DDS

Department of Oral and Maxillofacial Surgery, School of Dentistry, Shariati hospital, Tehran University of Medical Sciences, Tehran, Iran

Email: drsajjad_khan@yahoo.com

Abstract

Hemangiomas are benign vascular tumors of abnormally dense collections of dilated small blood vessels. They are usually located in the soft tissues. They do not necessarily present at birth but do typically appear in first one to two weeks of life at a rapid growth phase till about 6 to 7 months. They are usually asymptomatic.

For the general dentist and maxillofacial surgeons, these have considerable importance as sometimes if extraction is attempted can lead to severe bleeding. So knowledge of these is important for appropriate clinical management.

We report a case of 63 year old man with diagnosis of hemangioma on inner cheek lining of buccal mucosa, which is a rare site for developmental of Hemangioma. Clinical findings include a single sessile, painful mass with smooth surface measuring about 1.5x1.5 cm. The mass was dark blue in color present on the inner side of the right cheek lining of the buccal mucosa. histopathologic examination confirmed the diagnosis of hemangioma.

Keywords

hemangioma; buccal mucosa; hemorrhage

Introduction

Hemangiomas are benign vascular tumors which represent a rapid growth pattern. They are abnormally dense collections of dilated small blood vessels and usually located in the soft tissues. They do not necessarily present at birth but do typically appear in first one to two weeks of life at a rapid growth phase till about 6 to 7 months. They are usually asymptomatic and rarely seen at jaws. In case of acute hemorrhage, hemangiomas can be life threatening. Male to female ratio is relatively 1:1.5. Vascular supply is key for maintenance of healthy tissue conditions. These lesions are commonly located on skin, lips, intermax-

illary bones & intra mucosal deeper tissues [1-4,7,8,10]. Here we present a case of 63 year old man with hemangioma on inner cheek lining of buccal mucosa.

Clinical Case

A 63-year-old man was referred to Shariati hospital, Tehran, Iran with a main complaint of pain on the posterior part of buccal mucosa for 5 months. The patient complained of a tender mass in the inner cheek lining of the buccal mucosa. The patient reported that the mass had been there since 20 years ago.

There was no change in size. At that time, there was no pain or discomfort associated with the lesion. The patient had previous history of diabetes mellitus, hypertension and Chronic Obstructive Pulmonary Disease [COPD]. No abnormal habits such as smoking or eating disorders were typically found. The patient was completely edentulous.

Intraoral examination revealed a significant sessile, painful mass with smooth surface measuring about 1.5x1.5 cm. The mass was dark blue in color present on the inner side of the right cheek lining of the buccal mucosa. There was no bleeding associated with the lesion. The borders of the lesions were clearly defined. On palpation the lesion was soft & blanching was evident under pressure. Sonography of buccal mucosa was performed upon which the diagnosis of hemangioma was established. Removal of the lesion was performed under IV sedation. The lesion was removed in one piece and there was no significant bleeding during surgical removal.

Specimen was sent for histopathologic examination which confirmed the diagnosis of hemangioma.

In histopathologic examination, stratified squamous epithelium was seen in the oral mucosa. Proliferation of endothelial cells, scattered lymphocytes and plasma cells were also seen.



Discussion

Hemangiomas are typically seen in childhood & adults but few lesions persist later in life. These lesions adapt an indolent course. They may be developmental or congenital & grow rapidly in size till puberty & then regress. The exact etiology is unknown. Angiogenesis plays a vital role in hemangioma. Cytokines like Fibroblast Growth Factor (FGF) & Vascular Endothelial Growth Factor [VEGF] are typically involved in angiogenesis [5,6,11,14].

Oral mucosal lesions are common in elderly people. It is important to take complete medical history and physical examinations. Differential diagnosis of hemangioma includes mucocele, irritation fibroma, pyogenic granuloma, and Kaposi's sarcoma.

Rivera et. al conducted a retrospective study of 277 elderly patients. The aim of this research was to evaluate the frequency of oral mucosal lesions in a Chilean elderly population. In this study 20 cases of hemangioma were detected. Rest of them included irritation fibroma, burning mouth syndrome, oral lichen planus and epulis fissuratum [16].

Head and neck region is most commonly involved in these lesions. Oral site is less commonly involved [9] but if affected gingiva followed by lip, salivary gland, tongue & palate are involved [12]. In our case inner cheek lining of buccal mucosa was involved. Interestingly, our patient was completely edentulous and did not use denture for many years.

Sometimes these lesions are a challenge for physicians, dentists and surgeons in terms of complications such as uncontrolled bleeding [8,9]. In our case, the excisional biopsy was performed. Also, hemangioma resembles other entities like the vascular malformation, epulis, pyogenic granuloma, & oral squamous cell carcinoma. Extensive work up has to be done for accurate diagnosis & the most recent technology in accurate diagnosis of the suspicious lesions. For hemangioma detection, diagnostic methods are Computerized Tomography (CT), MRI, ultrasonography, arteriography and panoramic radiography [13,15].

Conclusion

Hemangioma rarely appears in the oral cavity [9]. It can occur anywhere in the human body. Hemangioma should be differentiated from other similar lesions such as mucocele, irritation fibroma, pyogenic granuloma, and Kaposi's sarcoma [14]. It is important for oral and maxillofacial surgeons to be aware of the characteristics of such lesions. Proper diagnosis is the key to success. Hemangioma may be problematic due to disruption of systemic health in elderly population. Such minor surgery where there is significant risk of bleeding should be performed under general anesthesia.

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Authors Information: Sajjad Baber*

Department of Oral and Maxillofacial Surgery, School of Dentistry, Resident, Shariati hospital, Tehran University of Medical Sciences, Tehran, Iran

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