CASE REPORT

Unusual Presentation of Pyogenic Granuloma of Buccal Mucosa

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ABSTRACT

Exophytic growth of the oral cavity often presents a diagnostic challenge because a diverse group of pathologic processes can produce such lesions. Among the exophytic growth of oral cavity inflammatory hyperplasia stands the most common etiology. The pyogenic granuloma is the most common type of inflammatory hyperplasia found in the oral cavity especially in gingiva. Extragingival occurrence of pyogenic granuloma is usually rare.

Hence, we report such a rare presentation of pyogenic granuloma on buccal mucosa in a 35-years-old male.

Keywords: Granuloma pyogenicum, Hyperplasia, Lobular capillary hemangioma, Pyogenic granuloma.

INTRODUCTION

Pyogenic granuloma is a common benign mucocutaneous lesion that occurs as a reactive inflammatory hyperplasia due to exuberant tissue response to local irritation or trauma. Hullihen’s description in 1844 was most likely the first pyogenic granuloma reported in English literature, but the term “pyogenic granuloma” was introduced by Hartzell in 1904. There are two kinds of pyogenic granuloma namely lobular capillary hemangioma and nonlobular capillary hemangioma type. Clinically these lesions usually present as single nodule or sessile papule with smooth or lobulated surface. The surface frequently erodes leading to bleeding. Pyogenic granuloma being an inflammatory hyperplasia, surgical excision is the treatment of choice. To avoid the possibility of recurrence, the lesion must be excised with the underlying tissue and predisposing irritants must be removed.

CASE REPORT

A 35-years-old male patient reported with the complaint of growth in the left corner of the mouth with the history of one year duration, which bled during chewing. Patient had noticed a small growth on the left side buccal mucosa, near the commissure of the lip, one year back. The growth gradually increased in size. The patient’s medical history was insignificant.

Intraoral examination revealed (Fig. 1) a solitary exophytic growth on the left side of buccal mucosa at the level of occlusal plane, close to the left commissure of the lip. A flower-shaped exophytic growth appears with central erythematous areas surrounded by grayish white borders. The surface appears lobulated and the swelling was pedunculated. The growth measured of about 2 cm × 1 cm in diameter, which was firm in consistency and bled on probing. The cusp of the left upper canine had sharp incisal edge corresponding to about the center of the swelling.

The growth was excised under local anesthesia. Figure 2 shows the macroscopic appearance of the excised pyogenic granuloma.

Photomicrograph (Fig.3) shows hematoxylin—eosin stained section showing areas of parakeratinized stratified squamous epithelium and few areas with fibropurulent membrane overlying the highly vascular stroma showing lobular pattern of vascular proliferation with areas of small blood capillaries and areas of large dilated blood vessel along with chronic inflammatory infiltrate in the stroma.
The histopathological features are suggestive of lobular capillary hemangioma.

DISCUSSION

The incidence of pyogenic granuloma has been described as between 26.8 and 32% of all reactive lesions. In the oral cavity pyogenic granulomas show a striking predilection for the gingiva, with interdental papillae being the most common site in 70% of the cases. In the present case, it is arising from the buccal mucosa. Gingival irritation and inflammation that result from poor oral hygiene, dental plaque and calculus or overhanging restorations may be precipitating factors in many cases. Pyogenic granulomas of head and neck are uncommonly seen. Extraginglyival, the pyogenic granuloma occurs in the area of frequent trauma sites, such as lower lip, tongue, palate and buccal mucosa. In the present case, the constant trauma inflicted by adjacent sharp cusp tip could have been the etiology behind the growth on the buccal mucosa.

Although pyogenic granuloma can be diagnosed clinically with considerable accuracy, radiographic and histopathological investigations, aid in confirming the diagnosis and treatment. All clinically suspected pyogenic granulomas must be biopsied to rule out other conditions, such as irritational fibroma, hemangioma, Kaposi’s sarcoma, leiomyoma, amelanotic melanoma, basal metastatic carcinoma, and squamous cell carcinoma.

The histopathological picture of the extragingival pyogenic granuloma is quite similar to the ones occurring on the gingival. Microscopically, it consists of many dilated blood vessels in a loose edematous connective tissue stroma. Sometimes, these vessels are organized in lobular aggregates and called as lobular capillary hemangioma. There is typically a dense acute inflammatory infiltration but this may be scanty or absent.

Treatment of pyogenic granuloma consists of conservative surgical excision, which is usually curative. There is a relatively high rate of recurrence (about 15%) after simple excision. Although, these are reactive hyperplasias, they have a relatively high rate of recurrence after simple excision, especially in pregnant patients. Recurrences after the surgery of extragingival pyogenic granuloma is however uncommon.

REFERENCES