



## Huge Sized Pyogenic Granuloma of Palate: A Case Report

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### Abstract

Pyogenic granuloma is a kind of inflammatory hyperplasia. The word 'inflammatory hyperplasia' is described as nodular growth of oral mucosa which contains inflamed fibrous and granulation tissue histopathologically. It is non-neoplastic. It is the most common gingival tumour with high predilection to gingivae. Approximately one-third of the lesion occur ensuing trauma. About 75% of all cases show calculus and other foreign material in gingival sulcus due to poor oral hygiene. Maxillary gingival region is more common than mandibular gingiva and are most common on the facial aspect of gingival. Clinically pyogenic granuloma is a lobulated, exophytic lesion and can be seen as small, red, and erythematous papules which is usually hemorrhagic in nature. Proper diagnosis, prevention, management, and treatment of the lesion is very important by excisional surgery along with other modalities like cryosurgery, excision by Nd: YAG laser, and sclerotherapy are alternative therapies. This article reports a case of a 40 years-old male patient with pyogenic granuloma in the Palatal region which is managed by surgical excision.

**Keywords:** Pyogenic Granuloma; Surgery; Pedunculated; Gingivaleter; SEM; Coffee; Carbonated Orange Juice; Artificial Saliva

### Introduction

The term 'pyogenic granuloma' is an improper, since the lesion does not contain any pus and is not strictly matches a granuloma. Approximately, one-third of the lesion due to poor oral hygiene and trauma [1] and is often represented as a painless, pedunculated or sessile growth of gingiva.

The first case is reported by Hullihen and the term "pyogenic granuloma" or "granuloma pyogenicum" was coined by Hartzell in 1904 [2].

Pyogenic granuloma is the most common of all the oral tumour like growths. While the terminology defines as a benign neoplasm, most of all not all fibromas show reactive focal fibrous hyperplasias due to trauma and local irritation. Although the word "focal fibrous hyperplasia" more precisely describes the clinical appearance and pathogenesis, but it is not commonly used [3].

Fibroma represents as a reactive focal fibrous hyperplasia under repeatedly trauma or local irritation<sup>3</sup>.presently two different histologically types of PG namely lobular capillary hemangioma (LCH) type and non-LCH type [4-6].

### Case Report

A 40-year-old male patient comes with chief complaint of growth in the right molar region buccally and palatally in oral and maxillofacial dept. six months ago, the growth started as a sessile, small, and painless growth which progressively increases to achieve the size of 4\*4 cm palatally and 1.5\*1.5 CMS buccally at present (Figure 1a-d).



Figure 1a: Preoperative.



Figure 1b: Gross specimen after excision.



Figure 1c: Post operative.

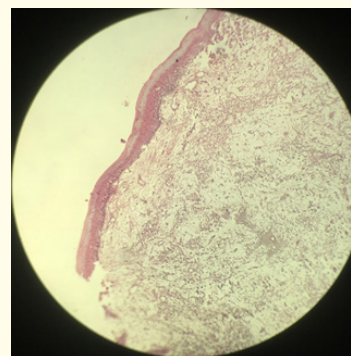


Figure 1d: Histopathological Finding.

There was having no medical history like diabetes, hypertension and other systemic disease. No lymph node enlargement was noticed either in cervical or submandibular region. Intraoral examination showed full complement of teeth. nevertheless, there was a pedunculated growth found on interdental gingiva in respect to 45 and 46 on the buccal aspect extending to the occlusal surface of teeth and there were concavity and ulceration on the occlusal facet of the growth. Palpatory findings revealed swelling measuring 5 × 3.5 cm which ample bleed on minor probing. The firmness of the growth was soft and fragile. Which helps in establishing, provisional diagnosis of pyogenic granuloma on the buccal gingival in relation to 46. Complete hemogram showed that the patient was nondiabetic and other finding was also in normal limit and was not

on any medication. Clinical examination reveals Peripheral giant cell granuloma and peripheral soft fibroma. Growth was causing discomfort in mastication, and for the tongue. An excisional biopsy was performed under local anesthesia and coverage of antibiotic Amoxicillin 500 mg 3 times daily (8 hourly) for 5 days, NSAIDS (Aceclofenac and paracetamol) for 5 days. Histopathological shows parakeratinized stratified squamous epithelium supported by connective tissue stroma. Focal areas of surface epithelium ulceration can be seen. connective tissue showed presence of large numbers of chronic inflammatory cell infiltrate, dilated blood vessels filled with RBCs, few lymph vessels, collagen fibres and fibroblast. Histopathological finding suggestive of Pyogenic granuloma. Post operative there was no complication reported. On regular follow up of one month showed satisfactory healing with no evidence of recurrence.

### Discussion

Pyogenic granuloma is an inflammatory hyperplasia affecting the oral tissues. the first pyogenic granuloma reported in the English literature by Hüllihen's in 1844. The first ever pyogenic granuloma term introduced in 1904 by Hartzell [5] and now it is universally accepted that this lesion is formed as a result of an overemphasis localized connective tissue reaction to a minor injury or any underlying irritation [7]. The aggravating factor can be calculus, poor oral hygiene, over hanging restorations, cheek biting, nonspecific infection, etc. Due of this irritation, the fibrovascular connective tissue becomes hyperplastic and the proliferation of granulation tissue leads to the formation of a pyogenic granuloma [8]. This may be occurred at all ages but is mostly seen in the second decade of life in young females, possibly because of female hormonal effect on vascularity [9]. The most common site affected is gingiva followed by the buccal mucosa, tongue and lips [8]. Pyogenic granuloma does not reoccur in general when excised with its base and all other underlying factors are removed. According to Vilmann et al, pyogenic granulomas are mostly found on the marginal gingiva and only 15% of the tumours on the alveolar part [10]. Zain RB et al., found in studies that Singapore populations have the greatest incidence of pyogenic granuloma in the second decade of life [11].

### Conclusion

In this paper, we concluded that Pyogenic Granuloma could attain a large size above 2.5-4 cm, due to painless lesion and delay in Treatment, as nerves do not proliferate within the reactive hyperplastic tissue, contributing to its unhindered growth. Thus, Pyogenic Granuloma should be taken into consideration when diagnosing large intraoral lesions. We also advocate marginal excision of alveolar ridge or removal of base of lesion following excision in order to minimize the recurrence.

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