



# EUROPEAN JOURNAL OF BIOMEDICAL AND PHARMACEUTICAL SCIENCES

<http://www.ejbps.com>

**ISSN 2349-8870**  
**Volume: 9**  
**Issue: 1**  
**457-459**  
**Year: 2022**

## PYOGENIC GRANULOMA: A CASE REPORT

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Article Received on 21/11/2021

Article Revised on 11/12/2021

Article Accepted on 01/01/2022

### ABSTRACT

Pyogenic granuloma is a common inflammatory hyperplasia of the oral cavity considered to be non cancerous in nature. Its most common location in oral cavity is the gingiva and it is classically thought to arise due to either chronic irritation or hormonal influences. Other than gingiva it may be reported over buccal mucosa but these sites are rarely affected. In this case report we report one such case of pyogenic granuloma of the gingiva over upper front tooth which is excised by traditional surgical method in the department of Periodontology.

**KEYWORDS:** Granuloma, Excision, Pedunculated, Hyperplasia.

### INTRODUCTION

Pyogenic granuloma is an inflammatory, hyperplastic growth of tissue and relatively common, tumor-like, exuberant tissue response to localized irritation, trauma or hormonal factors.<sup>[1]</sup> Histologically it does not resemble a granuloma and never contains purulent material; hence calling it pyogenic granuloma is a misnomer. It usually occurs on the gingiva but can occur on extra gingival sites such as lips, tongue and buccal mucosa.<sup>[2]</sup>

Due to trauma from adjacent teeth or prosthetics, lateral side of the tongue is a common location.<sup>[3]</sup> Pyogenic granulomas, primarily, are considered to arise due to either chronic irritation or hormonal influences. In this case report we excised the pyogenic granuloma completely over the gingiva by using traditional scalpel method.<sup>[4,5,6]</sup>

### CASE REPORT

A 38 year old female patient reported in the department of Periodontology with the chief complaint of gingival overgrowth in upper front teeth gingiva which is making disturbance while mastication. Pain is associated with the mastication only and not present otherwise. Clinical examination revealed round shaped, pedunculated tissue growth over the gingiva of maxillary front teeth between two central incisors measuring around 5.5 cm x 6 cm. It had a pedunculated attachment; color is erythematous with whitish patch over it. Palpation by hand shows the firm consistency which is non tender in nature. So based on overall observation and examination we arrived at a provisional diagnosis of pyogenic granuloma.

Then after the differential diagnosis and laboratory blood investigation we decided to go for the surgical excision by conventional method. Under local anesthesia (2% lignocaine and 1:80000 epinephrine), the tumor was completely excised and outline of tissue is removed by using curettes. After curettage is completed the periodontal dressing is given to control hemorrhage and guide the healing by protecting wound from mechanical forces. Medications prescribed and postoperative instructions are given and recalled after 8 days for periodontal dressing removal.



Before treatment



Intra-operative



After periodontal dressing



Excised tissue

## DISCUSSION

Pyogenic granuloma is a common tumor-like growth of the oral cavity. It is considered to be non-neoplastic in nature. Hullihen's description<sup>7</sup> in 1844 was most likely the first pyogenic granuloma reported in English literature, but the term "pyogenic granuloma" or "granuloma pyogenicum" was introduced by Hartzell in 19048. The term "pyogenic granuloma" is a misnomer because the lesion does not contain pus.<sup>[7,8,9]</sup>

Bhaskar et al. report that Pyogenic granuloma makes up for 1.85% of all oral pathologies. The term "Pyogenic granuloma" is somewhat inaccurate because such formations is not associated with infection, does not produce pus and there is no clinical or histological evidence of true granulation tissue.<sup>[10]</sup>

In 2010, a case of pyogenic granuloma was reported around an implant. This will be a more common occurrence as the number of implants and associated peri-implantitis cases increase.<sup>[11,12]</sup>

Differential diagnosis for pyogenic granuloma are kaposi's sarcoma, angiosarcoma, non-hodgkin's lymphoma, metastatic tumor, post extraction granuloma, pregnancy tumor, peripheral giant cell granuloma, peripheral ossifying fibroma, hemangioma, peripheral fibroma, hemangioendothelioma, hemangiopericytoma, bacillary angiomatosis.<sup>[13]</sup>

Treatment of pyogenic granuloma involves the removal of the causative agent which may sometimes result in spontaneous resolution. Adequate excision of the lesion is the treatment of choice.<sup>[14]</sup>

Other surgical modalities that can be used are cryosurgery, lasers, injection of ethanol or corticosteroid and sodium tetradecyl sulphate sclerotherapy. A newly developed tool, ultrasonic scissors can be safely utilized to excise this lesion on the tongue, reducing the blood loss and operative time substantially.<sup>[15]</sup>

In this case report we done the excision of pyogenic granuloma by using conventional instruments like 15 number BP blade and curetted the area with curettes. After proper and complete removal of granuloma we controlled the postoperative hemorrhage with the help of periodontal pack and recalled the patient after 8 days.

## CONCLUSION

Pyogenic granuloma of gingiva can result from trauma or any other irritation or due to poor oral hygiene. The clinical features of pyogenic granulomas that are very characteristic, help in making a differential diagnosis but are inadequate for a definitive diagnosis. They require a thorough histopathological diagnosis to differentiate them from true tumors of the oral cavity.

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