# **Pyogenic Granuloma: A Case Report**

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#### **ABSTRACT**

Soft tissue enlargements of oral cavity include a group of reactive hyperplasia which develops in response to chronic recurring tissue injury that stimulates an exuberant tissue response. Pyogenic granuloma is one of the inflammatory hyperplasia seen in oral cavity that is benign and rapidly growing lesion and bleeds easily. These enlargements often present a diagnostic challenge because of the different pathological processes involved.

**Key word:** pyogenic granuloma, reactive hyperplasia, soft tissue enlargements.

#### INTRODUCTION

Pyogenic granuloma is a common like proliferation exhibiting tumor tissue response exaggerated irritation or trauma. The term is a misnomer as it is neither pus producing nor a true granuloma. Oral pyogenic granuloma shows predilection striking for gingiva accounting for 75% of all cases. [1] Different etiological factors that can lead to formation of pyogenic granuloma are chronic low grade irritation, trauma, hormones, bacteria or viruses and certain drugs. [2-6] Differential diagnosis includes Peripheral giant cell granuloma, Peripheral ossifying fibroma, Haemangioma, Pregnancy tumor, Kaposi sarcoma and Non-Hodgkin's lymphoma. [7-8]

## **CASE REPORT**

A 14 year old male patient reported with the chief complaint of swelling since 1 month. The mass was not painful but interfered while eating and rinsing. Patient presented with the history of trauma almost one and a half month back after which he noticed a small growth with the respective site that enlarged to the present size. Extraoral examination was not significant.

Intraoral examination revealed a pedunculated exuberant growth in respect to buccal mucosa of 26. This discrete lobular growth measured about 13×10 mm covering almost two-third of the crown. On palpation, growth was soft in consistency and bled on provocation. Patient had poor oral hygiene. No caries and mobility was present with respect to 26. Based on clinical findings, the case was provisionally diagnosed as pyogenic granuloma.

#### MATERIAL AND METHODS

Intraoral periapical radiograph was taken and no bony involvement was seen. Routine haematological tests were within the normal range.

The lesion was surgically excised and curettage was done and the tissue was sent for histopathological examination. The findings were consistent with that of pyogenic granuloma which showed parakeratinized stratified squamous epithelium, ulcerated few areas. Underlying connective tissue stroma was fibrocellular with abundant proliferating endothelial cells. vascular spaces and chronic inflammatory cell infiltrate. The

patient was advised post-operative antibiotics, analgesic and maintenance of oral hygiene measures. Patient was recalled after 1 week for follow up. Patient reported back after 10 days.

### **RESULTS**

On intraoral examination, a small inflamed tissue of about 3×3mm, delineated

from the adjacent tissue was seen covering the marginal and attached gingiva in respect to buccal surface of 26. The tissue was suspected as recurrence of pyogenic granuloma so it was excised and open flap debridement was done to avoid any further complication.



Fig.1: Pre-Operative and Intra-Operative Images



Fig.2: Post-Operative Follow-Up After 10 Days

#### **CONCLUSION**

This case report highlights the reoccurrence of tumor. Factors that could have led to reoccurrence of tumor

- Incomplete excision of the tissue
- Incomplete removal of local irritants like calculus, food debris
- Poor maintenance of oral hygiene by the patient
- Traumatic injury
- Recurrence rate is high and is reported upto 16%

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