Pyogenic Granuloma: A Case Report

**Pyogenic Granuloma** is a common vascular nodule that may occur in the skin and mucous surface especially during childhood or early adult life. Young pyogenic granulomas are highly vascular in appearance ranging from soft to spongy in consistency; older lesions tend to become more collagenous and pink and are more rubbery and firm. Here a case report of Pyogenic Granuloma is discussed which was surgically excised.

**Introduction:**
Pyogenic granuloma is an exuberant overgrowth in response to irritation characterized by hyperplasia of connective tissue. Although originally thought to be caused by pyogenic organisms it is now believed to be unrelated to infection.

**Literature Review:**
Pancet and Dor (1987) first described this entity as "human botryomycosis".

Hartzel introduced the term pyogenic granuloma. Mills, Cooper and Fechner in 1980 suggested the term Lobular Capillary Hemangioma. Some Other Terms Suggested are Granuloma telangiectaticum, pregnancy tumor, Epulis gravidarum, hemangioma. Some Other Terms Suggested are Granuloma telangiectaticum, pregnancy tumor, Epulis gravidarum, hemangioma.

**Clinical Features:**
Pyogenic granuloma is a smooth or a lobulated mass that is usually pedunculated, although some lesions are sessile. Surface is characteristically ulcerated and smooth, granular or lobular, the color ranges from pink to red to purple depending upon stage of lesion. Surface ulcerations or usually present in areas where tumor, subjected trauma.

They vary from small growth only a few millimeters in size to a larger lesion that may measure several centimeters in diameter. Painless, although it often bleeds easily because of its extreme vascularity. May develop rapid growth which may alarm the patient and clinician as malignant growth. The lips, tongue and buccal mucosa are next common sites. Lesions are more common on maxillary gingival than mandibular gingival and anterior areas more frequently affected than posterior especially on facial aspect.

**Histological Features:**
It reveals a highly vascular proliferation that resemble granulation tissue but is localized. Epithelium is thin and atrophic but may be hyperplastic. It has a moderately intense infiltration of PMNs, lymphocytes and plasma cells. As the lesion matures there is gradual obliteration of many capillaries and it assumes a more fibrous appearance.

**Epidemiology:**
It occurs in all ages but in about 60% of instances; 11 to 40 years of age. Females are frequently affected (56.52% in 46 cases, 72.31% in 679 cases). It occurs in most races but most cases have been reported in the white race. In about 65 to 70% of instances, it is located in the gingiva, remaining lesions are distributed in the follow sites lips, tongue, buccal mucosa, palate, mucolabial or mucobuccal fold and alveolar mucosa of edentulous areas.

The most frequent gingival site is upper anterior facial region followed by lower anterior facial, upper posterior facial, lower posterior facial, upper anterior palatal upper post palatal lower anterior lingual and lower posterior lingual. Duration varies according to location of tumor. Recurrence is in 15% of cases.

**Case report:**
A male patient reported to the Department of Oral Medicine Diagnosis and Radiology, Career Post Graduate Institute of Dental Sciences, Lucknow with a chief Complaint of a swelling in gum during childhood or early adult life. Young pyogenic granulomas are highly vascular in appearance ranging from soft to spongy in consistency; older lesions tend to become more collagenous and pink and are more rubbery and firm. Here a case report of Pyogenic Granuloma is discussed which was surgically excised.

During History of Present Illness, it was revealed that he had a dull aching pain in upper right tooth region since last 6 months which was intermittent in nature and would relieve on taking pain killers. But pain has exuberated since past 3 days and is severe, throbbing type, continuous in nature and radiating to the whole of right side of face.

On examination, the swelling was present in 13 14 tooth region attached with a small solitary pedunculated base that was pear shaped. It extended from the distal aspect of 13 to distal aspect of 14. Mesio-distally and superior-inferiorly it extended from attached gingiva to the Buccal cusp of 14 (entire coronal portion covered). It had a lobulated smooth surface. It was red in color with no history of discharge. On palpation, no raise of temperature noticed, it was a soft fibrous non-tender and a firm swelling.
Provisional Diagnosis:
- Acute exacerbation of chronic periapical abscess i.r.t. 14
- Irritative fibroma distal to 13
- Pyogenic granuloma

Investigations:
IOPA i.r.t. 13, 14 region showed a radiolucency involving enamel, dentin and pulp of 13, 14 with widening of PDL space and loss of lamina dura i.r.t. 14.

Definitive Diagnosis: Pyogenic granuloma undergoing fibrous maturation.

Treatment:
- Cap. Amoxycillin – LB 500 mg (15), Cap. Metornidazole – 400 mg (15) 1-1-1 x 5 days, Tab. Paracetamol + Ibuprofen (9) 1-1-1 x 5 days
- Oral prophylaxis
- Excision of pedunculated mass distal to 13
- Endodontic treatment i.r.t. 14