

## LOBULAR CAPILLARY HEMANGIOMA-A CASE REPORT AND REVIEW OF LITERATURE

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## KEYWORDS :

## INTRODUCTION:

Lobular capillary hemangioma is the scientifically accurate term for this entity "pyogenic granuloma. It is more precisely known as a lobular capillary hemangioma. Formerly, pyogenic granulomas were assumed to be an excessive granulomatous reaction to an infectious or pyogenic stimulus, giving rise to terminology like 'pyogenic granuloma' and 'granuloma pyogenicum.' However, the term pyogenic granuloma is a misnomer that may cause some misunderstanding at first.<sup>[1]</sup>

The lesion grossly appears as a solitary, red, pedunculated papule that is very friable. Less commonly, it may present as a sessile plaque. It shows rapid exophytic growth, with a surface that often undergoes ulceration. It is often seen on cutaneous or mucosal surfaces. Among the latter, it is most commonly seen within the oral cavity.

When it arises in the intraoral mucosa during pregnancy, particularly on the gingiva, it is known as granuloma gravidarum, granuloma of pregnancy, or epulis gravidarum, and it usually occurs in the second or third trimester.<sup>[2]</sup>

## Case Report:

A 35 years old female came to our hospital with chief complaint of growth in the lower front tooth region for 2 months, history reveals the swelling is insidious in onset gradually increasing in size for 2 months and attained the present size ,no history of pain. No relevant medical and dental history, on examination an exophytic growth of size 1X1 cm is seen in between 32 and 33 ,which is erythematous and smooth without any surface changes, on palpation it is soft and sessile and non - tender.

Intra oral periapical radiograph was done, no significant bone loss was noted Surgical removal was recommended. Under infiltrative anesthesia, the lesion was excised. The lesion was fixed in 10% formalin and sent to the pathology laboratory. The histopathological examination revealed polypoidal lesion lined by ulcerated stratified squamous epithelium with underlying fibrocollagenous stroma containing proliferating capillary sized blood vessels lined by plump endothelial cell ,lymphoplasmacytic infiltrate and fibroblast.

## DISCUSSION:

Esmeili *et al.* in their review stated that hyperplastic reactive lesions represent as a group the most common oral lesions, excluding caries, periodontal, and periapical inflammatory disease. In this group, the second most common group is represented by hyperplastic reactive gingival/alveolar

lesions, including inflammatory gingival hyperplasia, oral pyogenic granuloma, peripheral giant-cell lesion and peripheral cemento-ossifying fibroma.<sup>[3]</sup> Ainamo suggested that trauma can cause release of various endogenous substances including angiogenic factors from the tumor cells and it may also cause disturbances in the vascular system of the affected area.<sup>[4]</sup>

In Whitaker *et al.*, study, it was suggested that the quantity of estrogen or progesterone receptors in oral pyogenic granuloma is not the determining factor in its pathogenesis of. Rather, such a role could be attributed to the levels of circulating hormones. The levels of estrogen and progesterone are markedly elevated in pregnancy and could therefore exert a greater effect on the endothelium of oral pyogenic granuloma.<sup>[5]</sup>

Highest incidence of pyogenic granuloma in second and fifth decades and females are slightly more affected than males. The gingiva was the most common site, followed by the lips, tongue, buccal mucosa, and hard plate.<sup>[6]</sup> It can manifest intraorally with a variety of clinical presentations, ranging from a sessile lesion to a raised mass. Pyogenic granulomas are often soft, painless, and reddish-purple in appearance. Radiographic findings are absent in pyogenic granuloma.<sup>[7]</sup>

Differential diagnosis of pyogenic granuloma includes peripheral giant cell granuloma, peripheral ossifying fibroma, fibroma, peripheral odontogenic fibroma, hemangioma, conventional granulation tissue, hyperplastic gingival inflammation, Kaposi's sarcoma, bacillary angiomatosis, angiosarcoma, and nonHodgkin's lymphoma.

Surgical excision is the treatment of choice and it is followed by curettage of underlying tissue is recommended in gingival lesions. Excision with 2 mm margins at its clinical periphery and to a depth to the periosteum or to the causative agent. Any foreign body, calculus, or defective restoration should be removed as part of the excision. Pyogenic granuloma lacks infiltrative or malignant potential. Recurrence is common.<sup>[8]</sup>



Figure:1

Figure:2



Figure:3

Figure:4

### CONCLUSION:

Pyogenic granuloma or granuloma pyogenicum is a well-known oral lesion. However, etiopathogenesis of oral pyogenic granuloma is still debatable. It lead to undue anxiety for patients, parents, and healthcare providers unfamiliar with the lesions and their prognosis. Patients typically need reassurance for this condition since they may be worried about more sinister conditions.

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