Pyogenic Granuloma of Buccal Mucosa: an Original Article

INTRODUCTION

Pyogenic granuloma is one of the most common benign tumors like proliferations affecting oral cavity. Several authors consider Pyogenic Granuloma as an inflammatory hyperplasia that ulcerates. Ulceration can occur most commonly because of trauma during mastication following which the lesion becomes contaminated by the oral flora and liquids; as a result an acute inflammatory response occurs.

Pyogenic granulomas typically occur on the mucosal surfaces, particularly the mouth and skin. These lesions may be seen at any age and tend to occur more commonly in females than males. Pyogenic granulomas are commonly seen on gingival, particularly the anterior surface. Hormonal changes of puberty and pregnancy may modify the gingival reparative response to injury, producing what was once called a “pregnancy tumor”. Under these circumstances, multiple gingival lesions or gingival hyperplasia may be seen. The lesions usually appear in second and third trimesters of pregnancy, most of which resolve soon after delivery.

Clinically Pyogenic granulomas begin as small, red papules that rapidly increase in size ranging from a few millimeters to several centimeters. However, they rarely extend to more than 4 cm in diameter. Few cases have even caused displacement of teeth resulting in malocclusion.

These lesions can also present as asymptomatic, pedunculated, raspberry like nodules which on passage of time become ulcerated due to secondary trauma. Initially the lesion may be covered by yellow, fibrous membrane or by epithelium of variable thickness. The lesions are delicate and minor trauma may cause considerable bleeding. Pyogenic granulomas may have an initial period of rapid growth, followed by stabilization and occasionally regression.

Clinically the differential diagnosis includes lesions with similar appearance such as peripheral gaint cell granuloma, peripheral odontogenic or ossifying fibroma, vascular lesions such as hemangioma and rarely metastatic carcinomas.

Purpose of study is to report an unusual case of extrag-
Pyogenic granuloma occurs in all ages but predominant in the second decade of life in young adult females, possibly because of vascular effects of female hormones. Incidence is increased in pregnancy which is related to increased level of estrogen and progesterone. Some studies conclude initial traumatic conditions are main etiologic factors for the development of Pyogenic granulomas.

Pyogenic granuloma usually appear as a localized solitary lump with sessile or pedunculated base and smooth or lobulated surface and is deep red or purplish in colour. Development of the lesion is slow, asymptomatic and painless but sometimes grows rapidly. Sometimes the surface may be ulcerated and friable, may be covered by yellow fibrinous membrane. Older pyogenic granulomas resemble fibromas due to more fibrous appearance.

Histologically it shows a connective tissue with distinct lobular arrangement with central larger vessels aggregates of well formed capillaries in the periphery. Clusters of polymorphonuclear leucocytes are present in some areas of granulation tissue, especially areas adjacent to necrotic or ulcerated surface. Neutrophils are present in the superficial zone of ulcerated pyogenic granulomas. Necrosis may be seen in association with surface ulceration.

In the present case the trauma and chemical irritation from the chewing tobacco (jarda) below the line of occlusion may have initiated the lesion.

As Pyogenic granuloma is a benign lesion, surgical excision is the treatment of choice. Other conventional surgical modalities for treatment of Pyogenic granulomas are cryosurgery, Nd : YAG, Co2 and flash lamp pulsed dye lasers have also been used. Recurrence rate of 16% have been reported. However recurrences after surgery of extra gingival pyogenic granuloma is uncommon. In our case there was no recurrence.

Conclusion – From the present case report it is concluded that pyogenic granuloma can be adequately treated with the correct diagnosis and proper treatment plan. Carefull management of the lesion also helps in preventing the recurrence of this benign lesion.

References