



J Obstet Gynecol India Vol. 59, No. 4 : July/August 2009 pg 349-351

## Case Report

# Granuloma gravidarum

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Key words : granuloma gravidarum, pregnancy tumor, pyogenic granuloma

#### Introduction

Granuloma gravidarum is a benign friable neoplasm of the oral mucosa which occurs during pregnancy. It is a self limiting condition. Generally, only symptomatic treatment is required. Destructive technic is needed only if it is causing inconvenience. Hallmark of the disease is a nonhealing red nodule that bleeds profusely with minor trauma and does not heal. Other synonyms of granuloma gravidarum are epulis gravidarum, granuloma pyogenicum, granuloma telangiectaticum, pregnancy tumor, lobular capillary hemangioma, pyogenic granuloma.

#### Case report 1

A 25 year old second gravida in her second trimester of pregnancy attended antenatal clinic with polypoid sessile mass arising from the lower lip with intense reddish color and bleeding off and on, after minor trauma (Figure 1). She had a history of similar growth at the same site in her previous pregnancy also. On

Paper received on 29/03/2006 ; accepted on 01/12/2006

Correspondence : Dr. Kamra Sangeeta 9/B, South Park Avenue, Sector IX, Bhilai, Chhattisgarh 490006 Tel. 0788 2346144 Email : sabakamra@rediff.com examination a sessile 5x5 mm growth which was partly compressible and did not blanch completely on applying pressure was seen on the lower lip. As pregnancy progressed the mass went on increasing in size to 15x10 mm became pedunculated and gave mulberry appearance (Figure 2). Her general examination, systemic examination and routine hemogram were well within normal limits. The patient desired the nonsurgical approach. Due to bleeding off and on, exudation of mucoid material and for cosmetic reason cryocautery was done, but within few days the mass grew again. After delivery, cryo cauterization was done again after which the growth regressed completely within six weeks.



Figure 1. Sessile tumour of case 1 during second trimester.

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**Figure 2.** Side profile of predunculated tumour of case 1 during third trimester

#### Case report 2

A 27 year old second gravida in early third trimester presented with a painless progressively increasing growth on the inner aspect of lower lip. On examination there was a 5x5 mm sessile, mulberry like growth on lower lip (Figure 3). Her first pregnancy was uneventful. Her systemic examination and obstetric findings were normal. As the growth was not causing much problem it was untreated. The patient was counseled that it could regress spontaneously after delivery. But after parturition the patient became apprehensive and did not want to wait till nature takes its own course. Hence cryocautery was done and the lesion removed completely.



Figure 3. Mulberry appearance of tumour of case 2

#### Discussion

Granuloma gravidarum is a benign tumor which usually appears in the second and third trimester. It is a

misnamed capillary proliferative lesion which is neither infectious nor granulomatous. It is composed of proliferating capillaries in a loose stroma and is relatively rich in mucin. This benign hyperplastic lesion usually appears in the oral mucosa, commonest site being mucosa of the lips and gums<sup>1</sup>. In both of our cases it appeared on mucosa of the lower lip. Granuloma pyogenicum of pregnancy in subcutaneous and superficial tissues have also been reported<sup>2</sup>. This rapidly growing lesion is typically a painless sessile or pedunculated mass of varied diameter with size varying from 5–10 mm. It starts as a small pin head sized lesion, which grows rapidly. It is prone to spontaneous hemorrhage or hemorrhage after minor trauma.

Histologically granuloma gravidarum present loose granulation tissue rich in capillary vessels and proliferation of endothelial cells, typically accompanied by a mixture of inflammatory cells. A thin epithelial layer overlies the lesion which is often ulcerated due to trauma associated with minor injury.

The exact etiology of pyogenic granuloma is unknown. Many factors have been suggested, including hormonal influences, as many of the lesions, though not all which appear during pregnancy resolve soon after delivery. Hormonal influences (specifically of progesterone) almost certainly play a role in the pathogenesis of pyogenic granuloma because these lesions commonly develop in pregnant women or in those taking oral contraceptives. Elevated levels of estrogen during pregnancy may play a role by direct hormone action as estrogen receptor was found weakly positive in a case reported by Demir<sup>3</sup>. Others have suggested that other pregnancy related angiogenic factors might play a role. A viral origin has also been hypothesized but seems unlikely because the most common types of human papilloma virus have been ruled out as etiologic agents by polymerase chain reaction (PCR) testing <sup>4</sup>.

Treatment during pregnancy is only needed if the lesion causes irritation or bleeding. Therapeutic alternatives can be in the form of a destructive technic using a laser, electro-cautery, cryocautery, or chemical cautery Gonzalez et al<sup>5</sup> report on treatment by 585 nm pulsed dye laser. Surgical treatment for removal is very occasionally required. Surgical removal with electrodessication and silver nitrate cautery of the base may be done. Some cases resolve spontaneously after delivery. In both our cases, good results were obtained with cryocautery.

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