

Case Report

Lingual granuloma gravidarum

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ABSTRACT

Granuloma gravidarum or pregnancy tumor is a benign lesion of the gingival mucosa which occurs during pregnancy. It is a pyogenic granuloma. This case report presents the clinical, histopathological features and the treatment of a granuloma gravidarum in a Sudanese patient in the puerperium.

Keywords: Lingual granuloma gravidarum, pregnancy tumor, pyogenic granuloma, epulis gravidarum.

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Granuloma gravidarum or pregnancy tumor is a pyogenic granuloma which develops on the gingiva during pregnancy.¹ This is a benign proliferative lesion of the oral mucosa which occurs in up to 5% of pregnancies.² It is a localized nonspecific lesion which is rapidly growing. The term epulis gravidarum has also been used to describe the same condition.³ The usual site is the gum, it can occur on the buccal mucosa and less commonly on the tongue.⁴ The lesion appears as an elevated dark red lesion that may or may not be ulcerated. Large masses of proliferating endothelial cells are separated by an edematous stroma containing inflammatory cells. Characteristically, the covering epithelium almost meets at the base of the lesion.⁵ The lesion may regress completely or heal as a residual fibrous mass or fibroepithelial papilloma.⁶ The usual clinical presentation is of a rapidly growing, painless mass of the gingiva or buccal mucosa that tends to bleed with mastication or routine brushing.⁷ During pregnancy, surgery should be recommended if bleeding or pain from the lesion impedes routine brushing or other daily activities,⁷ or after delivery if the lesion has not regressed completely.⁸ Recently, Powell et al described the use of Nd:YAG laser in the management of this

condition during pregnancy in a giant gingival lesion.⁹

Case Report. A 35-year-old Sudanese woman was examined at the Ear Nose and Throat Department of Wad Medani Teaching Hospital, Wad Medani, Sudan 2 days after delivery. She presented with a pediculated oval mass, the same color as the tongue, and bleeding on touch. The mass was arising from the left side of the dorsal aspect of the tongue and measuring about 2 cm in diameter (Figure 1a). The mass appeared during the 2nd trimester and was rapidly growing and painless. The mass caused intermittent bleeding on chewing, during speech and when brushing her teeth. There was no regional lymph node enlargement. Local and systemic examinations were normal. As the mass was pediculated, a staff member tied the pedicle with black silk (Figure 1a), to control the bleeding. The mass was later removed and the narrow base cauterized with silver nitrate. Blood and urine analysis were within normal limits. Histopathological examination (Figure 2a and 2b) confirmed the diagnosis of a pyogenic granuloma. The patient was seen 2 months after removal.

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Figure 1 - Patient photograph (a) showing a proliferative lesion on the left side of the dorsal aspect of the tongue ligated with a black silk ligature (b) after removal of the lesion.

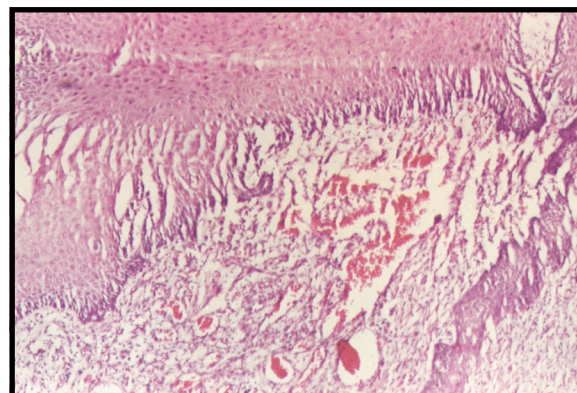
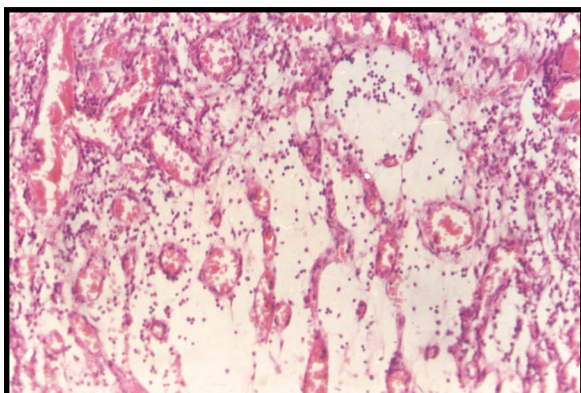


Figure 2 - Hematoxylin and eosin section (a) demonstrating large masses of proliferating endothelial cells separated by edematous stroma containing inflammatory cells (32 x 10) (b) showing the covering epithelium of the mass is of the same nature as the covering epithelium of the tongue (20 x 10).

Healing occurred normally and no recurrence was observed (Figure 1b).

Discussion. Granuloma gravidarum usually appears in the first trimester and rapid growth accompanies steady increase of circulating estrogens and progestins.² In this case the lesion was first noticed by the patient in the 2nd trimester. Repeated bleeding from the lesion annoys the patient and raises the suspicion of malignancy in both the patient and the treating doctor. In this patient the lesion also did not regress after delivery. For all these reasons the decision was reached to remove the lesion. Removal was easily achieved by simple surgical technique due to the pedunculated nature of the swelling. Histological examination showed the characteristic features of granuloma pyogenicum: large masses of proliferating endothelial cells, which are separated by an edematous stroma containing inflammatory cells

and the covering epithelium almost meeting at the base of the lesion. The covering epithelium is stratified non-keratinized squamous epithelium continuous with the covering epithelium of the tongue (Figure 2b).

In conclusion, granuloma gravidarum always raises the suspicion of malignancy. Removal and histological examination are necessary to confirm the diagnosis. If the lesion is pedunculated, simple surgical techniques are sufficient for its management.

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