

CUTANEOUS PYOGENIC GRANULOMA GRAVIDARUM WITH UNUSUAL LOCATION: REPORT OF 2 CASES

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ABSTRACT

Pyogenic granuloma gravidarum is a benign lesion with extensive endothelial proliferation occurring in pregnant women. It involves the oral gingiva most commonly. However a few cases that involve areas other than oral mucosa have been reported. In this case report we describe 2 cases of pyogenic granuloma that occur during pregnancy. One of them was giant lesion that involved columellar skin and nasal mucosa whereas the other one involved the vermilion of the lower lip.

Keywords: Granuloma gravidarum, pyogenic granuloma, pregnancy tumor

KUTANÖZ PYOJENİK GRANÜLOMA GRAVİDARUM: 2 OLGU SUNUMU

ÖZET

Pyojenik granüloma gravidarum, gebe kadınlarda geniş endotelial proliferasyon ile kendini gösteren benign bir lezyondur. Genellikle oral jinjiva yerleşimli olmak ile birlikte oral mukoza dışında yerleşim gösterdiği az sayıda vaka rapor edilmiştir. Bu yazıda gebelik süresi içerisinde oluşan iki pyojenik granülom olgusu sunulmaktadır. Bunlardan bir tanesi kolumella derisi ve nazal mukozada yerleşimli, diğeri ise alt dudağın vermilionunda yerleşimlidir.

Anahtar Kelimeler: granüloma gravidarum, pyojenik granülom, gebelik tümörü

INTRODUCTION

Pyogenic granuloma gravidarum (PGG) is a benign lesion with extensive endothelial proliferation occurring in pregnant women.^{1,2} It involves the oral gingiva most commonly it is also known to occur as a mucosal lesion of the lips, tongue, palate and nose.^{3,4} However there are a few case reports that involve these areas. We report 2 patients with PGG that occurred during pregnancy in which one of them was giant lesion that involved columellar skin and nasal mucosa whereas the other one involved the vermilion of the lower lip.

CASE REPORTS

Case 1: A 25-year-old female patient referred to our department with a polypoid vascular lesions in her nose after delivery. She first noticed the lesion at the third trimester of pregnancy. The lesion had slowly enlarged during her pregnancy but the patient did notice some change in its size at early postpartum period. Physical examination of the lesion revealed a reddish, lobulated pedunculated mass with 2 cm diameter at her columella (Figure-1). The pedicle of the lesion involved both columellar skin and septal mucosa (Figure-2). Since the main complaint of the patient was aesthetic appearance, excision was performed immediately without waiting spontaneous regression. The histopathological

examination of the material was reported as pyogenic granuloma.

Case 1: A 37-year-old woman was referred to our department with a polypoid, intense reddish color lesion of the lower lip during the 8-month of pregnancy. The lesion involved vermilion of the lower lip (Figure-3). The lesion was excised immediately following the delivery. Postoperative course was uneventful. The histopathological examination of the lesion revealed that the lesion was a pyogenic granuloma.

DISCUSSION

PGG occurs as mucosal or skin lesion in approximately % 5 of pregnant women.^{1,2} It is most commonly found in oral cavity, especially the gingival interdental papilla, but may also occur on the lips, tongue, and oral mucosa.^{1,2} Other less commonly reported sites are nasal mucous membranes, finger and toe nails beds, skin, and external auditory meatus.²⁻⁶

A variety of etiologic factors have been proposed, but most authors believe in a multifactorial etiology, including poor oral hygiene, local irritation by plaque and hormonal changes during pregnancy.^{1,4,7} PGG has been attributed to an exaggerated response to local recurrent irritants brought about by elevated levels of circulating



Figure 1: Appearance of the lesion located at the collumella



Figure 3: Appearance of the lesion located at the vermilioncutaneous junction.

sex hormones.¹ The endocrine effect seems to be in the higher circulating level of estrogen or progesterone rather than an increased estrogen or progesterone receptor numbers within the granuloma gravidarum.⁴ It has been proposed that elevated levels of estrogen and progesterone may simulate the endothelial proliferation of mucosal surfaces in the oral and nasal cavities but mechanism of their action still remains unclear.⁷

Although there have been several reports of mucosal pyogenic granuloma appeared during pregnancy, only a few cutaneous granuloma gravidarium developing in pregnancy, were reported.^{4,7,8} In our report, both lesions were cutaneous but one developed from both nasal mucosa and columellar skin and enlarged extra nasally with a pedicle. The pedicle comprised both mucosal and columellar skin component.

Clinical onset of PGG is usually in the second or third trimester of pregnancy, and partial or complete regression of the lesion is common after childbirth. Recommended treatment of PGG is to wait until after childbirth, if regression does not occur spontaneously, excision is performed for both histologic confirmation of the clinical diagnosis and to relieve symptom. However, if it interferes mastication, affects aesthetic appearance, bleeds or impedes daily activities, surgery can be performed during pregnancy.² We believe that, pyogenic granulomas that develop at other sites apart from gingiva, as seen in our cases, can be excized during pregnancy or immediately following the delivery without

waiting for regression. If the size of the lesion is too big and the excision of the lesion is difficult and primary closure distort certain anatomical structures, the excision of the lesion can be postponed until the regression of the lesion.

Most of the lesions are small and can be treated by simple excision. However profuse hemorrhage was reported by some authors.⁴ To lower the risk of bleeding Nd:YAG laser for the excision of this tumor was reported in a patient in the 36th week of pregnancy.⁹ Superselective embolization before surgical excision of the giant intranasal pyogenic granuloma gravidarum was also reported.³ However in our cases we did not use these measures since it was possible to excise the lesions without bleeding.

In conclusion, although granuloma gravidarum is most commonly seen as a mucosal lesion it can be seen any where of the body as a skin lesion. If the lesion impairs appearance of the patient, without waiting for spontaneous involusion, surgical excision is recommended.

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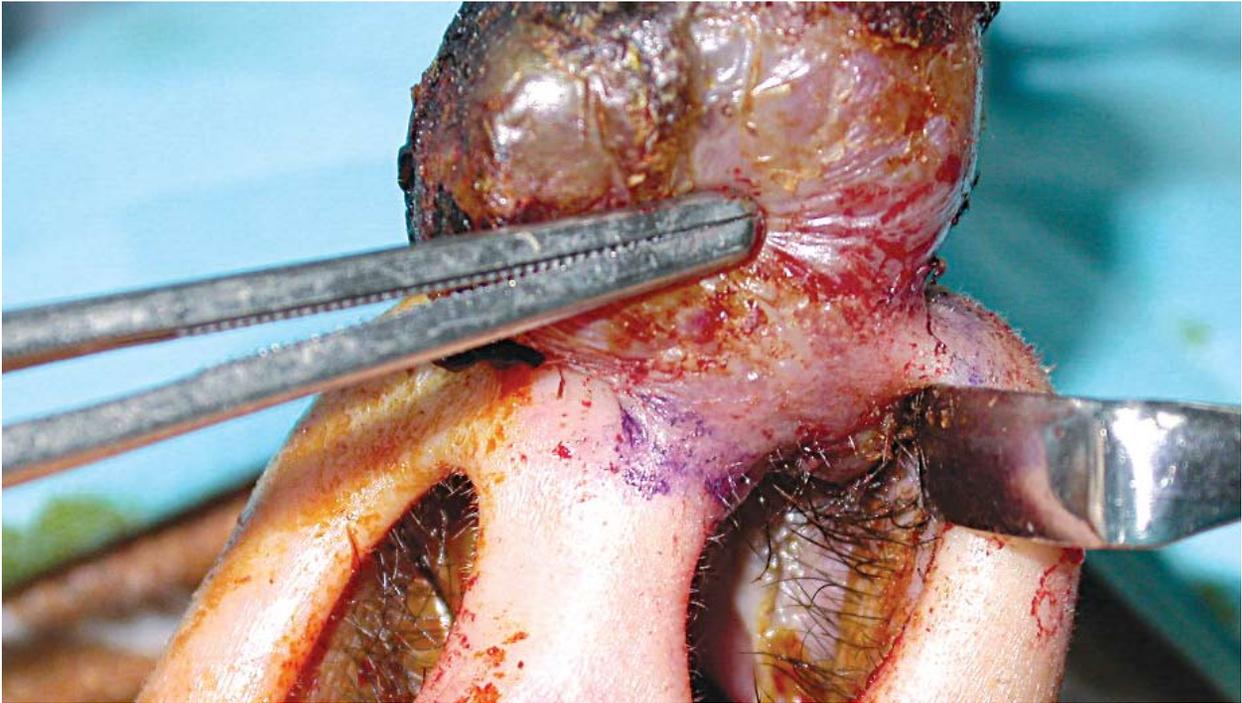


Figure 2: The pedicle of the lesion involved both columellar skin and septal mucosa.

KAYNAKLAR

1. Mussalli NG, Hopps RM, Johnson NW. Oral pyogenic granuloma as a complication of pregnancy and the use of hormonal contraceptives. *Int J Gynaecol Obstet* 1976;14:187–191.
2. Sills ES, Zegarelli DJ, Hoschander MM, Strider WE. Clinical diagnosis and management of hormonally responsive oral pregnancy tumor (pyogenic granuloma). *J Reprod Med* 1996;41:467-70
3. Creasy R, Resnik R. *Maternal-fetal medicine*, 4th ed. Philadelphia: WB Saunders, 1999.
4. Mark J, Catherine B, Graham T. Aural granuloma gravidarum. *Otolaryngol Head Neck Surg* 2003;129:149-151.
5. Sunil C, Craig A, Graham P, Swee T. A Case of Giant Nasal Pyogenic Granuloma Gravidarum. *J Craniofac Surg* 2005;16:319-321.
6. Lance E, Schatz C, Nach R, Thomas P. Pyogenic granuloma gravidarum of the nasal fossa: CT features. *J Comput Assist Tomogr* 1992;16:663–664.
7. Lim IJ, Singh K, Prasad RN, Chan HL, Lam RS, Ratham SS. 'Pregnancy tumor' of the nasal septum. *Aust NZ J Obstet Gynaecol* 1994;34:109–110.
8. Ong MA, Chai WL, Ngeow WC. Recurrent gigantic pyogenic granuloma disturbing speech and mastication: a case report and literature review. *Ann Acad Med Singapore* 1998;27:258–261
9. Yavuz D, Serap D, Fatma A. Cutaneous lobular capillary hemangioma induced by pregnancy. *J Cutan Pathol* 2004;31:77–80.