

Vulvar pyogenic granuloma in a pregnant wome : A rare association

*Corresponding Author: [El boukili hafsa](#)

Email: hafsaboukili@gmail.com

EL BOUKILI Hafsa*, **DOUHI Zakia**, **SOUGHI Meryem**, **ELLOUDI Sara**; **BAYBAY Hanane**; **Mernissi Fatima Zahra**

Department of Dermatology and Venerology , University Hospital Hassan II, Faculty of Medicine and Pharmacy, Sidi Mohamed Ben Abdellah University, Fez, Morocco

Abstract

Pyogenic granuloma is an inflammatory hyperplasia seen as a response to underlying irritating factor. It is now agreed pyogenic granuloma arises as a result of some minor trauma to the tissues. The skin of the head, neck, upper trunk, and hands and feet and the oral mucosa and gingiva are the most common sites, but it seldom appears on the female genitalia.

We reported the case of a women at the second trimester of pregnancy with pyogenic granuloma of the vulva which was excised and confirmed on histopathology.

Introduction

Pyogenic granuloma is a relatively common benign vascular lesion of the skin and mucosa whose exact cause is unknown [1]. The lesion usually occurs in children and young adults on the head, neck, extremities, and upper trunk [2]. The localization of the vulva is a relatively rare finding, and a limited number of cases have been reported in the literature [3,4,5]. In this case, we present a female patient in her second trimester a painful mass in right labia majora. It was excised and histopathological reports confirmed it to be a pyogenic granuloma pyogenic of the vulva

Case report

A 26-year-old multiparous woman at 34 weeks of gestation with history of gestational diabetes; who presented with a complaint of a growing and occasionally bleeding mass on the right labia majora that she had for half month. According to the patient, it bled occasionally on contact with her underwear. However, she did not recall any trauma or injury before she noticed the papule other than a history of itching for one month. On examination: a reddish papule pedunculated was observed on the right labia majora the surface of the lesion, which measured about 15-20 mm, was ulcerated (Figure1). The dermoscopic examination revealed: a reddish homogeneous area with whitish zones, a white lines like a double rail and hemorrhagic crusts (Figure 2).

She visited our dermatology department due to the malignant appearance of the lesion and the pain that she occasionally experienced. The lesion was excised. Histopathology revealed an ulcerated epidermis which is remplaced by a fibrino-leukocytic coating. In the dermis there was a vascular proliferation of congestive vessels bordered by turgid endothelial cells with

Received: Jan 01, 2024

Accepted: Feb 05, 2024

Published Online: Feb 12, 2024

Copyright: © **Hafsa E B** (2024). *This Article is distributed under the terms of Creative Commons Attribution 4.0 International License.*

Keywords: Pyogenic Granuloma, Pregnancy, Vulva.

Cite this article: Hafsa EB, Zakia D, Meryem S, Sara E, Hanane B, et.al., Vulvar pyogenic granuloma in a pregnant wome : A rare association. *J Clin Med Images Case Rep.* 2024; 4(1): 1625.



Figure 1: A pedunculated reddish papule on the right labia majora.



Figure 2: A reddish homogeneous area with whitish zones, and white lines.

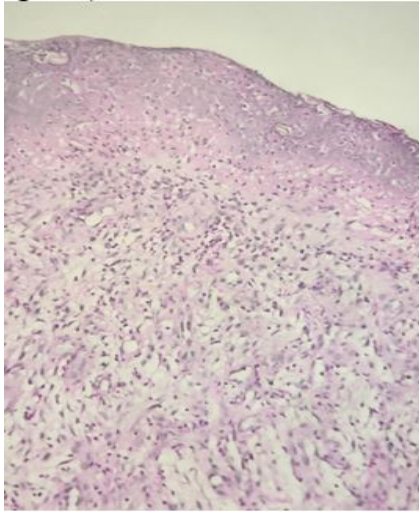


Figure 3: A vascular proliferation of congestive vessels in the dermis (H & E, × 100).

inflammatory cell infiltration made of lymphoplasmacytic cells and neutrophils (Figure 3).

The picture was suggestive of pyogenic granuloma, A Follow up was done for 4 months and no reoccurrence was evident

Discussion

PG occurs in all age groups. There is no clear predominance of a gender. PG appear as small or large, smooth or lobulated, reddish exophytic vascular nodules that can grow rapidly. PGs have a tendency to bleed; it usually presents as a solitary, lobulated, pedunculated or sessile benign growth over the face, arms, or hands [6].

It results from a reactive/inflammatory process and is filled with proliferating vascular channels, immature fibroblastic connective tissue, and scattered inflammatory cells. The surface is usually ulcerated and the lesion exhibits a lobular architecture.

The etiopathogenesis of pyogenic granuloma remains unclear. Minor traumas or underlying cutaneous diseases could cause an excessive local production of angiogenic growth factors or cytokines, which could be an important factor in the pathogenesis of PG [7,8]. However, one large study by Patrice et al found that 74.2% of cases gave no history of preceding trauma or a predisposing dermatologic condition [9].

In our case, a history of itching with is common and often due to hormonal changes observed at pregnancy that disrupt the pH balance of the vagina, also, a vaginal yeast infection, whose risk is increased in diabetes and uncontrolled blood glucose levels is a condition that causes itching and, as a result a chronic irritation hasten the growth of lesions

Pyogenic granuloma in pregnant women may resolve spontaneously after delivery, and conservative therapy is

sometimes the best strategy in those cases. Laser surgery can also be performed but it has not been proven to be superior [10]. Patrice et al report that full-thickness skin excision closed with stitches appears to yield the lowest chance of recurrence [2].

Conclusion

Vulvar pyogenic granuloma associated with pregnancy is a very rare clinical condition. We should keep in mind the diagnosis of PG in cases of rapidly growing, lobulated, erythematous, bleeding lesions of the vulva.

This case was presented to help physicians become aware that pyogenic granuloma may occur at this site and a careful management of the lesion also helps prevent the recurrence of this benign lesion

References

1. Requena L, Sanguenza OP. Cutaneous vascular proliferations. Part II. Hyperplasias and benign neoplasms. *J Am Acad Dermatol* 1997; 37: 887-919.
2. Patrice SJ, Wiss K, Mulliken JB. Pyogenic granuloma (lobular capillary hemangioma): a clinicopathologic study of 178 cases. *Pediatr Dermatol*. 1991; 8: 267-76.
3. S Gupta, BD Radotra, and B Kumar. "Multiple, genital lobular capillary haemangioma (pyogenic granuloma) in a young woman: a diagnostic puzzle," *Sexually Transmitted Infections*. 2000; 76(1): 51-52.
4. T Kaur, S Gupta, and B Kumar. "Multiple pyogenic granuloma involving female genitalia: a rare entity?" *Pediatric Dermatology*. 2004; 21(5): 614-615.
5. Nastaran Mahmoudnejad, 1 Alireza Zadmehr, 2 and Mohammad Hamidi Madani Vulvar Pyogenic Granuloma in Adult Female Population: A Case Report and Review of the Literature. 2021. case report in urology doi: 10.1155/2021/5525092.
6. Requena L, Sanguenza OP. Cutaneous vascular proliferations: Part II. Hyperplasias and benign neoplasms. *J Am Acad Dermatol*. 1997; 37: 887.
7. SJ Patrice, K Wiss, and JB Mulliken. "Pyogenic granuloma (lobular capillary hemangioma): a clinicopathologic study of 178 cases," *Pediatric Dermatology*. 1991; 8(4): 267-276.
8. MA Mooney and CK Janniger. "Pyogenic granuloma," *Cutis*. 1995; 55(3): 133-136.
9. Patrice SJ, Wiss K, Mulliken JB. Pyogenic granuloma (lobular capillary hemangioma): A clinicopathologic study of 178 Excision of cyst. cases. *Pediatr Dermatol*. 1991; 8: 267.
10. Shah M, Kingston TP, Cotterill JA. Eruptive pyogenic granulomas: a successfully treated patient and review of the literature. *Br J Dermatol*. 1995; 133: 795-6.