

## SKIMages

**Pustular Penile Pyoderma Gangrenosum: A Puzzling Clinical Presentation**

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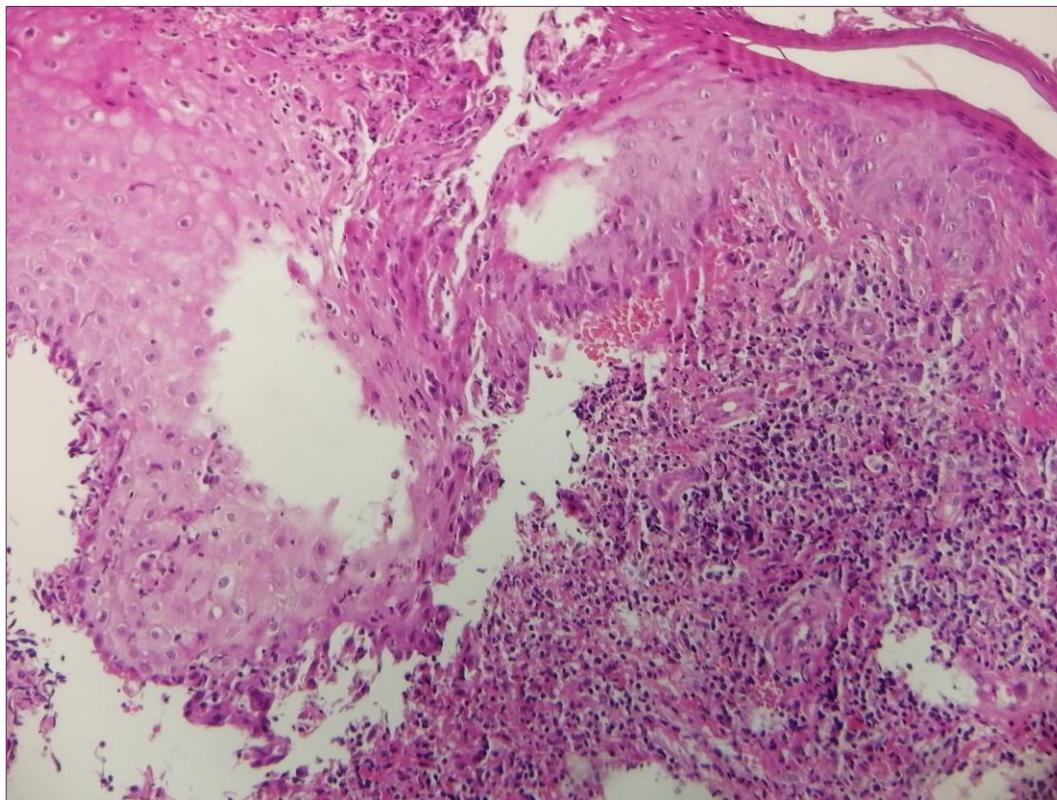
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**Figure 1** : Penile pyoderma gangrenosum : erosive, and sharply demarcated lesions on the glans penis

Pyoderma gangrenosum (PG) is a recurrent, chronic inflammatory neutrophilic dermatosis. It is usually associated with an

underlying systemic disease such as inflammatory bowel disease and hematological malignancy. PG may occur



**Figure 2:** Biopsy of the glans showing an ulcerated epidermis, fibrinous exudate, neovascularization, and an acute inflammation beneath characterized by a dense and diffuse, predominantly neutrophilic infiltrate (H&E x100)

anywhere on the body while it is classically described on the lower extremities<sup>1</sup>.

A healthy 60-year-old Moroccan man developed a persistent, erythematous vesiculo-pustular erosive, and sharply demarcated lesions on the glans penis (Figure 1). The patient denied extramarital sex and no relevant medical history has been reported. Further physical examinations were unremarkable. The lesions were unresponsive to topical fusidic acid 2% cream twice daily for a period of 2 weeks. The skin biopsy showed patterns of PG (Figure 2) and tissue cultures were negative for bacteria, mycobacteria, and fungus infection, full blood screening was normal. Topical clobetasol propionate 0.05% was prescribed once daily for 4 weeks and every other day for 4 weeks resulting in a complete resolution. The follow-up period was marked by a recurrence after 8 months, lesions were

treated with topical tacrolimus 0.1% once daily for 1-month and completely healed after 2 weeks.

Four clinical variants of pyoderma gangrenosum have been described: ulcerative, bullous, vegetative, and pustular. Frequently, one form of PG is seen in a patient and up to 25% of patients recall a history of pathergy phenomenon (the abnormal development of skin lesions at the sites of trauma, including minor injuries)<sup>1</sup>. The pustular form is a rare variant showing painful vesiculo-pustular lesions that don't ulcerate and are commonly observed on the trunk and on the extensor surfaces. Histopathology shows a dermal neutrophilic infiltrate and subcorneal neutrophilic micro pustules. It is commonly observed in patients with active ulcerative colitis. Only a few cases have been reported in the literature and were associated with hyperglycemia and

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hyperlipidemia. The diagnosis might be challenging as there are no specific histopathologic or immunofluorescent features and it is mainly based on clinical hallmarks, the association with systemic diseases and the exclusion of differential diagnosis.

Topical tacrolimus therapy is effective and is recommended as a first-line modality<sup>2</sup>. Surgical debridement is not recommended in the acute stage due to the risk of tissue progression<sup>3</sup>.

Hence, we report the first case of pustular penile pyoderma gangrenosum without an underlying disease successfully treated by topical monotherapy.

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