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Case Report

# An Isolated Genital Psoriasis: Uncommon Location That Make the **Diagnostic Difficult** Hallab I<sup>1,2\*</sup>, O.Stitou<sup>3</sup>, O. Boudi<sup>1,3</sup>, R. Frikh<sup>1,3</sup>, N. Hjira<sup>1,3</sup>, M. Boui<sup>1,3</sup>

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#### Abstract

There are many dermatoses that can affect the genital area. These may be isolated genital conditions or signs of a general cutaneous disorder. Genital dermatoses can be classified as physiologic variants, and inflammatory, neoplastic, or infectious in etiology. Psoriasis is a chronic autoimmune disease, which has a prevalence of about 3% with genital involvement, reported in 29% a 40% of patients. Although the diagnosis of genital psoriasis can be aided by the presence of classic psoriatic plaques on the body, the penis may be the only affected region. In uncertain cases, a skin biopsy can lead to diagnosis. Initial management should consist of mild topical corticosteroids with increasing potency titrated to effect or topical calcineurin inhibitors. Systemic therapy with disease modifying small molecules or biologic drugs may be considered when disease is particularly bothersome, widespread, or unresponsive to conservative approache. This article provides a broad overview for dermatologists in addressing the Psoriasis wich is placed on. Recommendations for diagnostic evaluation, treatment, and appropriate follow-up are discussed.

Keywords: Genital Psoriasis, Diagnostic Difficult, calcineurin.

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## Introduction

The genital area can be affected by numeral cutaneous diseases of varying causes. Dermatoses of the penis and scrotum can mostly be characterized as inflammatory, neoplastic, and infectious disease [1].

Psoriasis is a chronic autoimmune disease, which has a prevalence of about 3% with genital involvement; reported in 29%-40% of patients [1].

Genital psoriasis can be isolated, making its diagnostic difficult. However, characteristic clinical and dermoscopy findings can aid in diagnosis.

In uncertain cases, a skin biopsy can lead to diagnosis. Initial management should consist of mild topical corticosteroids with increasing potency titrated to effect or topical calcineurin inhibitors. Systemic therapy with disease modifying small molecules or biologic drugs may be considered when disease is particularly bothersome, widespread, or unresponsive to conservative approache [1].

This article provides a broad overview for urologists in addressing the Psoriasis wich is placed on characteristic clinical findings to aid in diagnosis. Recommendations for diagnostic evaluation, treatment, and appropriate follow-up are discussed

#### CASE DESCRIPTION

A 34-year-old Moroccan man with no personal or familiar history of serious illness, presented to our hospital. He reported a red itchy squamous plaque lesion on the anterior part of the shaft of the penis appearing from 2 years.

There is no lower limb ædema and no jaundice. Physical examination of the skin shows multiple itchy squamous plaques lesions of the shaft of the penis covered with silvery scales with no regional adenopathy.

Dermoscopy examination shows homogenous and symmetrical dotted vessels after removing thick superficial scales that cover them and multiple tortuous vessels.

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Biopsy was done, and confirmed the diagnostic of psoriasis. Mild corticosteroid oinments was administrated and the evolution was marked by a total regression of lesions.

## **DISCUSSION**

Psoriasis is an inflammatory autoimmune condition that can affect the genital area. 63% of adults with psoriasis will have psoriatic lesions in the genital area [2].

In the case of inverse psoriasis, the preponderance of genital psoriasis augmented to 79% [2]. Genital psoriasis can occur in all age groups, with a insignificant preference for younger male patients with moderately severe malady [2].

The pathophysiology is multifactorial, Triggers are common, but aren't the same for everyone. Some of the most regular are: Infections, Skin injuries, being overweight or obese, Smoking, Heavy drinking, Stress, Certain medicines, Cold weather [3].

It includes epidermal hyperproliferation, abnormal differentiation of epidermal keratinocytes, and inflammation with altered immunologic response in the skin [4].

Psoriatic lesions on the genital skin often present as well-demarcated, brightly erythematous, thin plaques and usually lack [5].

In male patients, both scrotal and penile skin may be affected. The glans penis is the site of male genital skin that is most frequently affected [5].

Whereas in uncircumcised patients the well-defined non-scaling plaques are most common under the prepuce and on the proximal glans, in circumcised male patients the red lesions are usually present on the glans and corona [5].

Psoriatic genital lesions of the glans and corona in circumcised males can be scalier than those usually seen in genital skin [5]. Genital lesions may be accompanied by rhagades or fissures, which can cause definite discomfort [5].

Patients with genital psoriasis may also experience pruritus and/or a burning sensation in the affected area, genital Psoriasis is generally not associated with scarring [5]. It does not have characteristic scale seen on other body sites, because of increased moisture around genitalia [1].

However, scales may be seen on the more keratinised regions of the genital skin. When scaling is present, it is often minimal and can easily be scraped off, leaving pinpoint bleedings [5].

Exacerbation of cutaneous lesions by trauma from tight-fitting clothing, sexual intercourse, and irritation from perspiration, urine, and feces may happen [1].

Although most genital psoriatic lesions represent plaque-type psoriasis, the genital area may also be affected by pustular psoriasis. Both generalised and localised pustular psoriatic eruptions may affect the genital skin [5].

On dermoscopic; Psoriatic lesions consist of either dilated or tortuous capillaries, with a typical "bushy" homogeneous aspect or dotted vessels, depending on magnification, regularly distributed over a light red background.

Dotted vessels with uniform and regular distribution over a pale red back- ground represent the stereotypical aspect of genital psoriasis. Therefore, this typical combination of vascular morphology and arrangement is the main dermoscopic criterion in the differential diagnosis of genital psoriasis [6].

A skin biopsy is not usually necessary to diagnose psoriasis. However, in the event that a biopsy is deemed necessary, certain key features can be seen. Classic histopathological findings of plaque psoriasis include hyperkeratosis, parakeratosis, loss of the granular cell layer, epidermal acanthosis, dilated and tortuous vasculature, and a leukocytic infiltrate. The histology of uninvolved skin will be normal [7].

Most of the authors are reluctant in the prescription of corticosteroids for genital psoriasis if necessary, moderate steroids, which may be combined with vitamin D analogues or mild tar preparations [8].

Although weak corticosteroids are preferable because of their mild side- effects, they often seem insufficiently potent to induce a response. Some experts therefore advise short-term, intermittent use of moderate-to-potent corticosteroids to induce a response. Vitamin D analogues can be prescribed as monotherapy or in combination with steroid preparations. They may cause irritation, which may be minimised by their combination with steroids. Nevertheless, some author's advice against the use of vitamin D analogues, as these may be too irritating to apply to the genital area. Systemic therapy is prescribed in case of extensive psoriatic lesions but no common prescription in isolated genital psoriasis [8].

To get the best results from treatment you want to avoid irritating genital psoriasis. Use a mild, fragrance-free cleanser; you want to avoid deodorant or antibacterial soaps and body washes. These can irritate the delicate skin, causing genital psoriasis to flare.

Gently applying a fragrance-free moisturizer to the psoriasis after bathing and when the area feels dry can reduce chaffing and irritation. Use quality toilet paperthat can help reduce irritation. Avoid getting urine or feces on genital psoriasis. These can cause psoriasis to flare [9]. Wear loose-fitting underwear and clothing. Tight-fitting clothing can cause friction, which can worsen genital psoriasis. Get plenty of fiber in your diet. Eating a high-fiber diet or taking a fiber supplement will ease bowel movements [9].

### **CONCLUSION**

Genital psoriasis presents, when isolated, a difficulty in diagnosis, but a combination of the clinical findings, dermoscopic and histopathological features will often lead to the correct diagnosis of the prosiasis.

In cases of uncertainty, skin biopsy can be performed to aid in diagnosis. The psychological side of genital psoriasis makes it hard for the patient to consult and therefore take the suitable treatment, which is in most cases topical and effective.

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