Psoriasis Penis - A Two Case Report

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Abstract

Psoriasis vulgaris is a chronic, multisystem, genetic, noncontagious inflammatory disorder. Psoriasis limited to the glans penis is a rare presentation. We present two patients with penile involvement and absence of psoriatic lesions elsewhere on the body, which led to delay of diagnosis. Due to the specific localization, the treatment of choice was the calcineurin inhibitor pimecrolimus 1% crème with satisfactory results. The dermatology practitioner should be aware of the limited penile psoriasis as this condition is only occasionally reported in the literature and might be much more frequent in the daily practice.

Introduction

Psoriasis vulgaris is a common inflammatory disease. Localization on the elbows, knees, scalp and nails is the hallmark of the plaque type psoriasis. Involvement of the inguinal folds and scrotum is the well known inverse psoriasis. Psoriasis limited to the glans penis is a rare presentation. We present two patients with psoriasis limited to the penis treated with Pimecrolimus 1% crème.

Case Report(s)

Case 1
A 46-year-old circumcised man presented to the clinic with 15-year history of intermittent erythematous eruption of the glans penis. After sexual intercourse the lesions became more apparent. The Results from multiple bacterial and fungal cultures came back negative. Previous treatment with topical antifungals, corticosteroids and antibiotics resulted in temporary or limited improvement. There was no medical or family history.

On physical examination, the tip of glans penis was covered with annular erythematous and infiltrated plaques with elevated borders (Fig. 1). Blood tests, urinalysis, PRP, TPHA and HLA-B27 were negative. A 4-mm punch biopsy was performed and the result showed parakeratosis, absence of granular layer, psoriasiform acanthosis as well as dilated capillaries in the upper dermis. Munroe abscesses and spongiform pustules of Kogoj were present in the upper squamous layer (Fig. 2).

The clinical and histopathological findings supported our diagnosis of psoriasis vulgaris. Topical Pimecrolimus 1% cream for 4 weeks was used. The follow-up visit 2 months after the discontinuation of treatment showed that the patient was free of lesions.

Case 2
A 33-year-old uncircumcised man presented to the clinic with an eruption on the penis dating back for 6 months which appeared after sexual intercourse. The patient complained of local irritation upon washing with water and soap. He denied drug intake. Past medical history and family history were negative for any disease. On clinical examination erythematous circinate and nummular papules and plaques were found on the glans and corpus penis (Fig 3). In addition hypopigmented macules were found at the base of the penis. Serology tests for syphilis, HIV, HBV, HCV were negative. The histology result from the penile lesion showed parakeratosis, absence of granular layer and psoriasiform acanthosis, which were consistent with psoriasis. The treatment with topical Pimecrolimus 1% cream led to fading of the lesions.

Discussion

Data from dermatology and urology studies show that the most common genital dermatosis is psoriasis.(1) In many cases male genital involvement with psoriasis is part of a more generalized cutaneous disorder. Occasionally, the entire scrotum and penis are involved.(1) To the best of our knowledge, only a few cases of psoriasis limited to the male genital area are described. (2-4) When the disease is manifested only with penile eruption, the clinical diagnosis of psoriasis may be difficult and should be supported by histopathology.(5,6) The differential diagnosis includes Rieter’s syndrome, lichen planus, lichen nitidus, seborrhoeic dermatitis, secondary syphilis, fixed drug eruption, irritant and allergic balanitis, erythroplasia of Queyrat, plasma cell balanitis of Zoon, Bowenoid papulosis. Some infective causes of balanitis such as fungal, anaerobic, aerobic, protozoal and viral should be excluded. Many balanitides prove difficult to diagnose and any condition which persists despite simple treatment warrants further investigation.(7)
Penile biopsy is easy to perform and is useful in these cases.

Psoriasis on circumcised penis has typical infiltrated scaly plaques. On the contrary, psoriasiform desquamation is not present when the glans is covered by the foreskin. (1) The majority of patients with penile psoriasis are found to be uncircumcised. (4) Thus, the penile foreskin may promote inflammation by a Koebner phenomenon. Psoriasis in the genital area can result from the friction of clothing, condoms and sexual contact. Furthermore, irritation from the urine trapped beneath the foreskin may be a precipitating factor. However, circumcision in case 1 has not led to fading of the disease.

The management of genital psoriasis can be difficult. Corticosteroids, vitamin D analogues or tars have a limited use in light of their known side effects. According to the guidelines for topical treatment of psoriasis, pimecrolimus is recommended for intertriginous and facial psoriasis. (8) Our patients tolerated pimecrolimus 1% cream very well. The lesions disappeared completely.

References

Illustrations

Illustration 1

Fig. 1. Annular erythematous and infiltrated plaques with elevated borders on the glans penis.

Illustration 2

Fig. 2. Munroe abscesses and spongiform pustules of Kogoj in the upper squamous layer (HE, x40).
Illustration 3

Fig. 3. Erythematous circinate and nummular papules and plaques were present on the glans and shaft of the penis.
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