

Coexistence of Anogenital Psoriasis and Genital Warts – Is There an Optimal Treatment?

The prevalence of psoriasis is 2% of the world's population (1). Inverse psoriasis is characterized by the development of erythematous shiny plaques at intertriginous areas of the body. The prevalence of only anogenital involvement appears to be low, but involvement of the anogenital area together with other areas is found in up to 45% of patients with psoriasis (2).

A 21-year-old female student with a 3-month history of mild psoriasis (erythematous plaque on the elbows and nail pitting on the nails of the hand) was referred to our Department. One month earlier, suddenly appearance of erythematous, smooth, clearly demarcated plaques was observed on the labia majora, the mons pubis, the perineal and perianal region together with a brownish hyperkeratotic papule on the pubic region (Figure 1, a-b). The patient underwent excisional biopsy at the Department of Surgery, and the pathohistological finding was unavailable to us. The elbows were treated with corticosteroid-keratolytic preparation, whereas the anogenital lesions were treated with moderately potent topical corticosteroids. In addition to anogenital erythema, on clinical examination we noticed an erythematous plaque on the site of excision with a hyperkeratotic verrucous papule on the edge of the lesion (the Koebner phenomenon on the site of skin injury). In the pubic region, we noticed two hyperkeratotic papules and a few verrucous papules on labia majora. Localized dermatophyte or candida infection were excluded with a KOH test and scrapings culture. Serology for syphilis, HIV, and hepatitis were negative. Cervical Pap smear was normal. Biopsy of erythematous lesion from the mons pubis was conclusive for psoriasis, and of the keratotic papule with the genital wart with positive HPV 6 and 11. The patient's older sister had chronic plaque psoriasis.



Figure 1. (a-b) Anogenital psoriasis; Koebner phenomenon on the site of excisional biopsy on the pubic region with a hyperkeratotic verrucous papule on the edge of the lesion and few genital warts on the pubic region and labia majora.

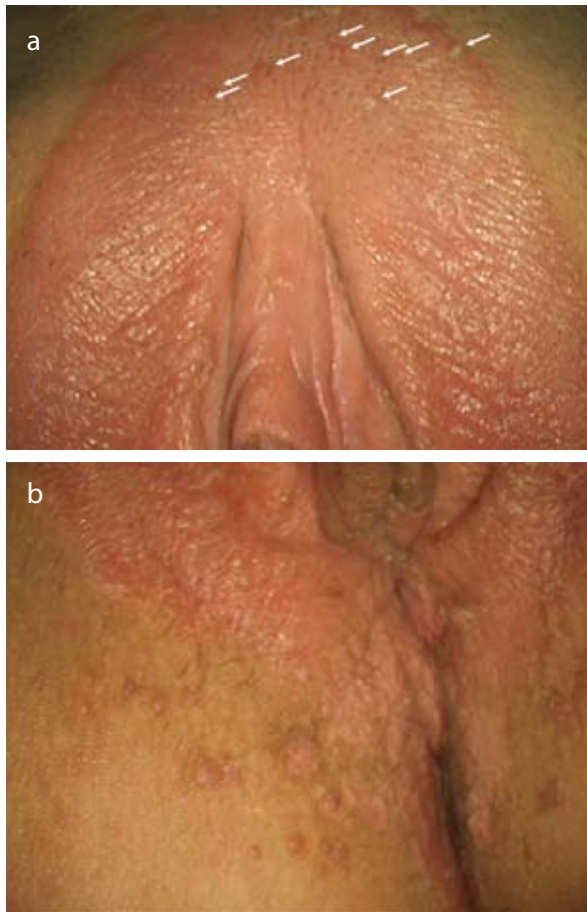


Figure 2. Anogenital psoriasis (a) with sparse genital warts (b) or exacerbation of multiple anogenital warts following different treatment modalities for psoriasis and genital warts.

We employed physically ablative methods like liquid nitrogen cryosurgery, electrocauterization, and curettage, applied topical agents like 0.5% podophylotoxin solution, 20% podophyllin, and 80% trichloroacetic acid, and treated the psoriatic lesions with a short course of moderate-potency corticosteroids and tacrolimus ointment. All therapeutic attempts were ineffective for curing both diseases. Our patient either had psoriasis with sparse genital warts or exacerbation of multiple anogenital warts (Figure 2, a-b).

Anogenital psoriasis is a skin disease that causes great discomfort. The disease-related quality of life is significantly reduced, especially regarding sexual behavior. Therapy for either anogenital psoriasis or genital warts is not entirely satisfactory. Many topical agents suitable for use on the psoriatic lesions on the body, such as coal tar, anthralin, vitamin D derivatives

or retinoids, may be too irritating in the anogenital region. The most useful therapy for treatment of anogenital psoriasis are moderately potent topical corticosteroids and topical tacrolimus or pimecrolimus (1). However, corticosteroid-induced atrophy is possible in intertriginous sites. The Koebner phenomenon isomorphous response is the appearance of new skin lesions on areas of cutaneous injury in otherwise healthy skin (3). About 25% of patients with psoriasis have elicitation of psoriatic lesions by injury to the skin (4). Other than in patients with psoriasis, the Koebner phenomenon can be found in other skin diseases like vitiligo, lichen planus, lichen nitidus, pityriasis rubra pilaris, flat warts, and keratosis follicularis (Darier disease) (5). According to Eyre et al., about 67% patients with psoriasis (4) present with clearing of psoriatic lesions following skin injury (positive "reverse" Koebner reaction) (4).

There is no single treatment for genital warts that is 100% effective, and different types of treatment are very often combined. Accepted methods of treatment involve chemical and physical destruction or removal (6). Since psoriasis koebnerizes, any destructive technique may exacerbate the psoriasis.

Coexistence of anogenital psoriasis and HPV presents a huge therapeutic problem because a therapy for psoriasis such as corticosteroids can provoke appearance and/or reappearance of HPV infection, while some therapies for anogenital warts, like cryotherapy, curettage, laser ablation, electrosurgery, or surgery can provoke the appearance and/or reappearance of psoriatic infection due to the Koebner phenomenon.

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