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Tinea profunda of the genital area. Successful treatment of a rare skin disease

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ABSTRACT: We present a rare case of 36-year-old female patient, who developed a severe Majocchi granuloma in the pubis after waxing, with isolated causative agent Trichophyton mentagrophytes. The condition was initially misdiagnosed as a bacterial folliculitis and treated unsuccessfully with topical corticosteroids and antibiotics. After the adequate diagnose was confirmed by mycological examination, followed by histopathological verification, complete remission of the symptoms was achieved at the 4th week after initiating 6 weeks course of antifungal therapy with Terbinafine 250 mg/daily dose, while good therapeutic response was observed even in the 10th day. The etiopathogenesis of the disease, as well as its current treatment options are considered, in respect to the rare occurrence of this condition in the pubic area and its frequent misdiagnosis.

KEYWORDS: Majocchi granuloma, pubis, tinea genitalis profunda, Trichophyton mentagrophytes

Introduction

First described by Professor Domenico Majocchi as granuloma tricofitico in 1883, nowadays Majocchi granuloma is defined as a deep folliculitis, caused by dermatophyte infection (1). Although, the most commonly isolated causative agent is Trichophyton rubrum, numerous different dermotophytes are reported in association with this condition, including Trichophyton mentagrophytes, Trichophyton violaceum, and Epidermophyton floccosum (2,3). A precursory trauma on the skin, as shaving or waxing or disruption of hair follicles and transfer of the dermatophyte into the dermis, as a result of folliculate occlusion could be a predisposing factor (3). Majocchi granuloma is more frequently seen in young women, who often shave their legs, although any haired part of the body can be affected (1). The

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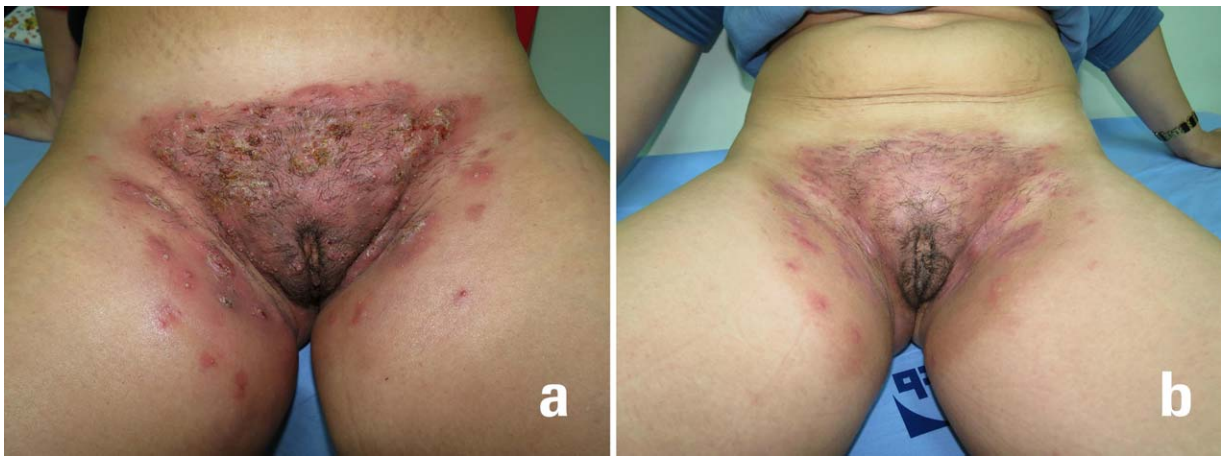


FIG. 1. (a) The initial clinical manifestation of Majocci granuloma on the pubis-erythematous plaque on the pubic and inguinal area, covered with multiple follicular pustules and crust. (b) Clinical presentation of the good therapeutic response, 10 days after systemic administration of Terbinafine 250 mg per day.

condition is also described in man, where application of potent topical steroids on underlying immunosuppression is reported as accompanying risk factors, leading to more severe clinical manifestation (4,5).

Case presentation

A 36-year-old female patient presented with a 6 months history of severe itching and moderate pain in the pubic area, where couple of days after waxing, reddish rash with fine desquamation occurred (FIG. 1). The patient was treated ineffectively several times with topical corticosteroids and antibiotics, as well as with macrolide's antibiotics per os. Within the dermatologic examination, severe erythematous plaque with multiple follicular and nonfollicular pustules and crusts was clinically observed, covering the whole pubic area, including the medial upper part of the hips, as well as the inguinal area. Edema of the labii majora was also presented. Enlarged lymph nodes in the inguinal area were detected on palpation. According to the history, no accompanying disease or medication on other occasion was reported, neither unusual sexual contact before the occurrence of the symptoms. The conducted additional blood tests were within the normal range. The microbiological cultures were negative. The performed cultural mycological examination revealed Trichophyton mentagrophytes. Histopathologically a perifollicular infiltrate consisting histiocytes, neutrophils, eosinophils, lymphocytes, and giant cells was observed. Rupture of the follicular epithelium and massive dermal fibrosis. Suppurative folliculitis to dense granulomatous infiltrates and many hyphae.

An antifungal regimen was initiated with per oral administration of Terbinafine 250 mg per day for total duration of 6 weeks. Good therapeutic response was observed after 10 days, when a relief of the subjective symptoms was reported and reducing of the swelling and the redness was clinically observed. Complete remission of the symptoms was achieved at the 4th week after initiating the antifungal regimen. The treatment was discontinued on the 6th week, without evidence of any recurrences during the following year.

Discussions

Although most commonly affecting scalp and legs, Majocchi granuloma or granuloma trichophyticum may develop on any hair-bearing area, as in the presented case (6).

The initial typical clinical symptoms of solitary or multiple well-circumscribed oval patches and perifollicular papulopustules and nodules with or without background erythema and scaling could be camouflaged if topical steroids are applied (7). Differential diagnosis should considered kerion, although unlike it, granuloma trichophyticum may become suppurative only if secondarily impetigo develops (6). In contrast, tinea corporis, defined as a superficial cutaneous dermatophyte infection of the trunk and extremities, occurs much rarer in the genital area, most commonly affecting patients in the tropical

regions, as Trichophyton mentagrophytes (var interdigitale) takes second place as a causative agent (7). Contamination is associated with human-to-human and animal-to-human contact or soil-to-human spread (3,7). Autoinoculation from concomitant tinea with other location has also been described (8–10). Recently published by Luchsinger et al. case series described tinea genitalis as a new entity of sexually transmitted infection (7). It should be considered that mycological examination with KOH in cases with Majocchi granuloma could be falsely negative, because of the spreading of the causative agent deeper than stratum corneum (1,2). Beneficial to the diagnostic process could be the history of contact with animals or humans, as well as the presence of concomitant fungal infection (1,3), which were all negative in the presented case.

Accurate treatment of deep fungal infection of genital area required proper identification of the causative agent (11,12). However, systemic antifungal treatment regimen is considered to be most effective in Majocchi granuloma worldwide (13). Oral administration of terbinafine for 4–6 weeks of duration is the preferred treatment option in both patients groups—immunocompromised and not (13). Systemic administration of antifungal agents is mandatory, because only topical application is usually ineffectively (1). A combined regimen with topical and systemic antifungal is reported with more rapid satisfactory results (6,11).

In the presented case, systemic administration of Terbinafine 250 mg was initiated for 6 weeks, as good therapeutic response was observed in the 10th day, while complete remission of the symptoms was achieved at the 4th week and no evidence of relapses was observed during the following year.

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