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A Case of Tinea Incognito

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Abstract

A 62-year-old male farmer presented to our clinic with eruption and mild itching on the right hand. He stated that this eruption had begun 15 days previously and that he had presented to the local general practitioner. Dermatological examination revealed a lesion containing maculopapules approximately 6x7 cm in size on the dorsum of the right hand with mild margin activation and a very few occasional red squamae. Dermatophyte infection was primarily suspected. We learned from anamnesis that the drug previously administered was clobetasol dipropionate, raising the possibility of tinea incognito (TI). Native preparate was performed from the squamae on the lesion. Fungal hyphae were observed at microscopic examination. In describing this case diagnosed as TI, we wish to emphasize that specimens should be taken for microscopic examination with KOH in patients with a similar clinical appearance at differential diagnosis, and that treatment should be administered accordingly.

Keywords: Tinea Incognito, case, immunosuppressive

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A Case of Tinea Incognito

Tinea incognito (TI) is a clinical picture emerging with the use of immunosuppressives such as calcineurin and steroids, generally as a result of misdiagnosis of dermatophyte infections [1]. It was first described by Ive and Marks in 1968 [2]. It has an extraordinary clinical appearance, in which typical morphological characteristics, such as vesicles, squamae, an oval or round appearance and a well-defined margin, seen in dermatophyte infections and particularly tinea corporis, are not observed [1,3].

A 62-year-old male farmer presented to our clinic with eruption and mild itching on the right hand. He stated that this eruption had begun 15 days previously and that he had presented to the local general practitioner. However, there had been no decrease in the itching following the cream prescribed by that physician, and the eruption had grown slightly, rather than improving. Dermatological examination revealed a lesion containing maculopapules approximately 6x7 cm in size on the dorsum of the right hand with mild margin activation and a very few occasional red squamae (Figure 1). Dermatophyte infection was primarily suspected. We learned from anamnesis that the drug previously administered was clobetasol dipropionate (Dermovate®), raising the possibility of TI. Native preparate was performed from the squamae on the lesion. Fungal hyphae were observed at microscopic examination (Figure 2). The patient was given 250 mg/day terbinafine tablets and local butenafine cream. However, he failed to attend subsequent check-up.

TI is a clinical condition exhibiting an atypical appearance resulting from topical pimecrolimus, tacrolimus and steroid use for dermatophyte infections [4,5]. This may be caused by patients using medications without being examined or to long-term use of these drugs due to misdiagnosis of dermatophyte infections [4]. The use of immunosuppressives suppresses local immune response and leads to easy fungal growth and multiplication. Fungi establish granulomas by progressing toward the dermis. In typical dermatophyte infections, erythematous annular lesions with distinct margins generally occur around a healthy central area in regions other than the scalp, palms and nails. In TI, however, fungal infection leads to an atypical appearance in which erythema, squamae and scarring are minimal, in which papules and modules can generally be seen and margin activation may disappear [1,4]. Mild loss of margin activation and a plaque with erythema and papules was detected in our case.

TI may be confused with other dermatological conditions, such as granuloma annulare, discoid lupus erythematosus, erythema annulare centrifugum, erythema migrans, pityriasis rosea, psoriasis, impetigo and eczema, and may be difficult for some clinicians to diagnose [1,5]. TI should therefore be considered in patients with a similar clinical picture whose lesions do not improve, and which even continue to increase, despite potent topical corticosteroid use [3]. Microscopic examination with KOH, fungal culture or biopsy and histopathological tests in the absence of squamae can be performed when TI is suspected. Presence of hyphae or spores at KOH examination is sufficient for diagnosis [4,5]. Diagnosis in our patient who was given and used clobetasol dipropionate on suspicion of dermatitis was confirmed by determination of fungal hyphae at microscopic examination from squamae with KOH on suspicion of TI.

The immunosuppressive drug used by the patient must first be discontinued in treatment. In addition, although local antifungal therapies can be used, they may be insufficient in the face of fungal elements, and systemic antifungals should be added. For that purpose, terbinafine, ketoconazole and butenafine can be used locally, and fluconazole, itraconazole and terbinafine can be employed systemically [4]. We gave our patient local butenafine together with systemic terbinafine.

In conclusion, in describing this case diagnosed as TI, we wish to emphasize that specimens should be taken for microscopic examination with KOH in patients with a similar clinical appearance at differential diagnosis, and that treatment should be administered accordingly.

In addition, unnecessary distress to patients and increased treatment costs can be avoided if other physicians in addition to dermatologists are aware of this.

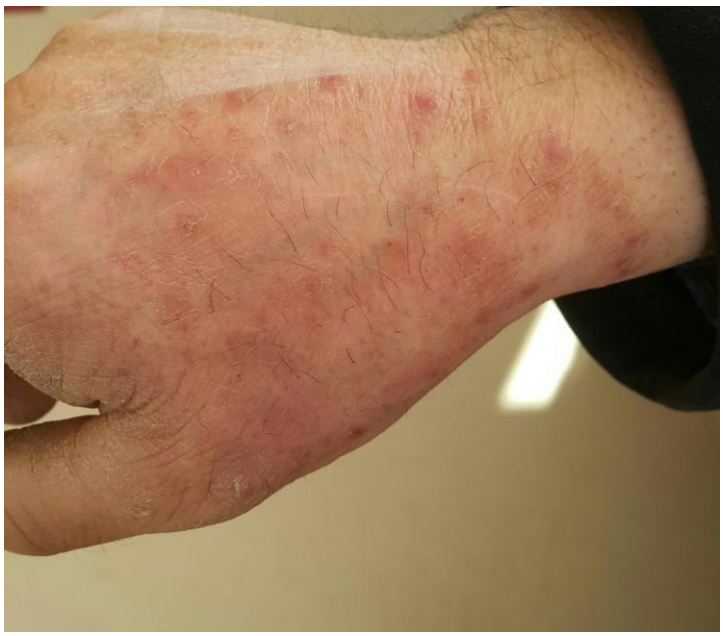

Figure 1. lesion containing maculopapules approximately 6x7 cm on the dorsum of the right hand with mild margin activation and a very few occasional red squamae

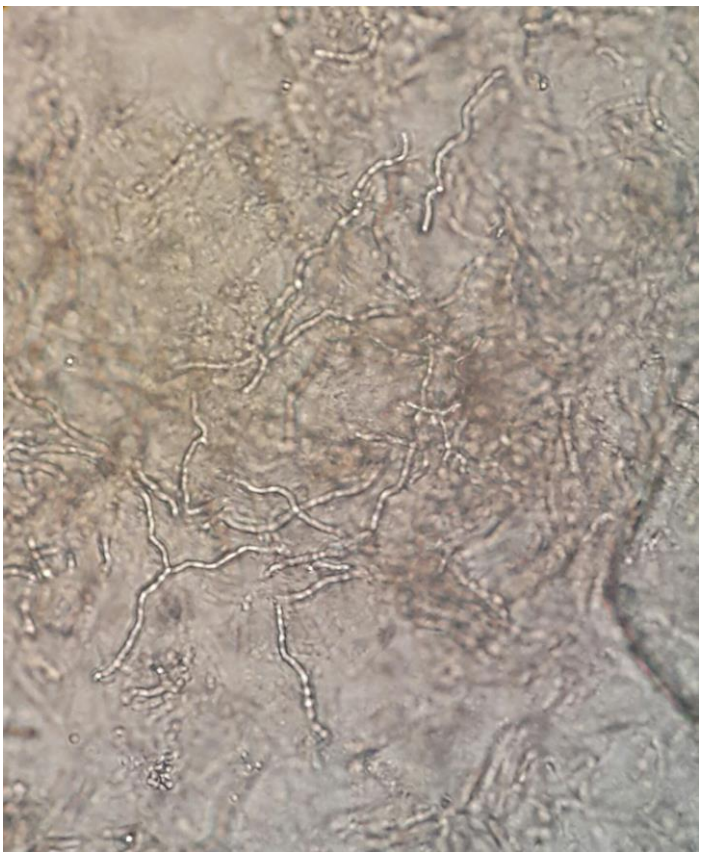

Figure 2. Fungal hyphae observed at microscopic examination

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