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#### OLGU YAZISI / CASE REPORT

# Tinea İnkognitolu 4 Olgu Sunumu

Four Cases with Tinea Incognito

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ÖZ

Tinea inkognito, topikal immunsupresif ajanlarla yanlış tedavi sonucunda atipik klinik bulgularla karakterize bir dermatofitozdur. Diğer dermatozlarla karışabilen çok çeşitli klinik prezentasyonlara sahiptir ve bu da tedavide gecikmeye neden olmaktadır. Bu raporda, tinea inkognitolu 4 olgu sunulmuştur. Topikal steroidlere yanıtsız atipik deri lezyonlarına sahip 4 olgunun direkt mikroskopik incelemesinde mantar hifi pozitifti ve tüm vakalarda antifungal tedavi ile tam klinik ve mikolojik kür sağlandı. Sonuç olarak topikal immunosupressif ajanlara yanıtsız atipik deri döküntülerinde tinea inkognito tanısı da akla gelmelidir. Klinik olarak kesin tanı konulamayan eritemli, skuamlı deri lezyonlarında topikal steroid tedavisi başlanmadan önce mantar incelemesi yapılması tinea inkognito gelişimini azaltacaktır.

**Anahtar Kelimeler:** Tinea, topikal tedavi, steroid.

#### **ABSTRACT**

Tinea incognito is a dermatophytic infection with atypical clinical presentation because of the mistreatment with topical immunosuppressant agents. It has various clinical presentations and may mimic other dermatoses causing treatment delay. Here, four tinea incognito cases were presented. All four patients had atypical skin lesions unresponsive to topical steroids and positive direct microscopic examination for fungi. In all cases following antifungal treatment, total cure was established. In conclusion, in atypical skin lesions unresponsive to immunosuppressant treatments, tinea incognito should be suggested. Performing direct microscopic examination for erythematous scaly skin lesions before starting topical steroids will reduce tinea incognito development.

**Keywords:** Tinea, topical treatment, steroid.

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### INTRODUCTION

Tinea incognito is a dermatophytic infection with atypical clinical presentation because of the mistreatment with topical immunosuppressants such as steroids or immunomodulators. It has various clinical presentations and may mimic other dermatoses causing treatment delay. In this report, 4 tinea incognito cases are presented.

## **CASE PRESENTATION 1**

A 13-year-old girl presented with a pruritic erythematous eruption over the trunk and pubis that was present for ten days. The medical history revealed that the eruption had started from the trunk and disseminated fastly after the topical application of a corticosteroid cream within one week. Dermatological examination revealed erythema annulare centrigum like erythematous annular plaques with sharply defined borders and trailing scale over the trunk and pubic region (**Figure I**). Physical examination was otherwise normal. Direct microscopic examination of scrapings of both trunk and pubis lesions were positive for fungal hyphae.



**Figure I:** Erythema annulare centrigum like erythematous annular plaques with sharply defined borders and trailing scale over pubic region.

#### **CASE PRESENTATION 2**

A 68-year-old male was referred with a pruritic eruption over medial side of upper leg that was present for one month. It was learned that the eruption had started as a small erythematous patch one month ago and disseminated and after the topical application of a corticosteroid cream within two weeks. Physical examination revealed erythematous plaque with serpiginous border and satellite indurated papules over the anteromedial side of the upper leg (**Figure II**). Direct microscopic examination was positive for fungal hyphae.



**Figure II:** Erythematous plaque with serpiginous border and satellite indurated papules over the anteromedial side of the upper leg.

#### **CASE PRESENTATION 3**

A 21-year-old woman presented with a pruritic erythematous eruption over the upper leg. The medical history revealed that the eruption started two weeks before and disseminated fastly after the topical application of a corticosteroid cream within one week. Dermatological examination revealed erythematous patches with irregular borders over the medial side of the upper leg (**Figure III**). Physical examination was otherwise normal. Direct microscopic examination of scrapings of skin lesions were positive for fungal hyphae.



**Figure III:** Erythematous patches with irregular borders over the medial side of the upper leg.

#### **CASE PRESENTATION 4**

A 34-year-old male was referred with a pruritic eruption over the face and neck that was present for two months. It was learned that the eruption had started as erythematous papul over the right malar region and disseminated to the jaw, bilateral neck and left malar region after the topical application of a corticosteroid cream within one month. Dermatological examination revealed granuloma annulare like annular erythematous plaques and indurated papules over the bilateral malar region and lateral sides of the neck (**Figure IV**). The other physical examination was normal. Direct microscopic examination was positive for fungal hyphae.



**Figure IV:** Granuloma annulare like annular erythematous plaques and indurated papules over the malar region.

For these four cases, with the history of rash unresponsive to corticosteroid therapy along with fungal hyphae at direct microscopic examination a diagnosis of tinea incognito was made. The patients were informed, the corticosteroid treatment was stopped and than combined treatment with oral terbinafin, topical isoconazole cream and topical terbinafin cream was started. Within two weeks of treatment improvement was observed and after four weeks all lesions cleared. In all cases total clinical and mycological cure was established and treatment was continued two weeks after the patients had no longer symptoms.

### **DISCUSSION**

Dermatophytoses are cutaneous fungal infections caused by fungi that have the unique ability to invade and multiply within keratinized tissue (hair, skin and nails). Cutaneous fungal infections are usually characterized by pruritic, erythematous squamous lesions with a greater degree of redness and scaling at the margin of the lesion and central clearing. Mistreatment of dermatophytoses with topical immunosuppressants such as steroids or immunomodulators leads to atypical tinea infections called as tinea incognito. Easy access to these drugs, mistreatment by some physicians other than dermatologists and selfusage without an advise of a doctor delay the diagnosis and enhance the progression of fungal infections causing tinea incognito development (1).

Tinea incognito can be seen in any age and sex group. It usually presents as erythematous squamous plaques but sometimes it mimics other dermatoses such as pustular and intertriginous psoriasis, pytriasis rosea, impetigo, folliculitis, perioral dermatitis, lupus erythematosus, drug eruption, erythema migrans, pemphigus and seborrheic dermatitis and in these cases the clinical diagnosis may be more difficult (1-7). In routine clinical practice diagnosis is usually made by clinical history and direct microscopic examination. Occasionally fungal culture and histopathological examination are done.

Tinea incognito usually requires systemic treatment with oral antifungal agents. Treatment duration depends on the clinical response. After the total clearance of the lesions treatment must be continued for one-two weeks to prevent recurrences.

In conclusion, tinea incognito is not a rare clinical entitiy and in cases with atypical skin lesions unresponsive to immunsuppressants tinea incognito and its various clinical presentations

must be remembered. To reduce development of tinea incognito, especially non dermatologist physicians should be educated about various clinical forms of cutaneous fungal infections and direct microscopic examination to rule out fungal infections should be performed before starting topical immunosuppressant therapies for erythematous scaly skin lesions. Moreover, reform of over-the-counter product sales system should be done to prevent easy access to topical immunsuppressant drugs such as topical steroids.

#### **REFERENCES**

- **1.** Arenas R, Moreno-Coutino G, Vera L, Welsh O. Tinea incognito. Clin Dermatol 2010;28(2):137-9.
- **2.** del Boz J, Crespo V, Rivas-Ruiz F, de Troya M. Tinea incognito in children: 54 cases. Mycoses 2011;54(3):254-8.
- **3.** Serarslan G. Pustular psoriasis-like tinea incognito due to Trichophyton rubrum. Mycoses 2007;50(6):523-4.
- **4.** McGinness J, Wilson B. Tinea incognito masquerading as granulomatous periorificial dermatitis. Cutis 2006;77(5):293-6.
- **5.** Feder Jr HM. Tinea incognito misdiagnosed as erythema migrans. N Engl J Med 2000;343(1):69.
- **6.** Guenova E, Hoetzencker W, Schaller M, Röcken M, Fierbeck G. Tinea incognito hidden under apparently treatment-resistant pemphigus foliaceus. Acta Derm Venereol 2008;88(3):276-7.
- **7.** Rallis E, Koumantaki-Mathioudaki E. Pimecrolimus induced tinea incognito masquerading as intertriginous psoriasis. Mycoses 2008;51(1):71-3.