

Case Report

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Tinea Incognito: Case Report

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ABSTRACT

Tinea incognito (TI) is defined as absence of the classic annular configuration of tinea infection. It is caused by misuse of topical or systemic corticosteroids and less frequently by calcineurin inhibitors. Herein we present a 15-year-old boy presented with 8 months history of persistent mildly itchy skin lesions on his face. Patient used many topical treatments including steroid, but no improvement. Skin examination showed multiple well defined scaly patches and plaques on his face. Potassium hydroxide (KOH) microscopic examination and fungal culture revealed dermatophytes fungi. Itraconazole 200 mg capsules once daily for 2 weeks was prescribed. The skin lesions disappeared completely.

KEYWORDS: Tinea incognito (TI); Tinea atypica; Dermatophytoses.

INTRODUCTION

Tinea incognito (TI) is the term given to a dermatophyte infection with atypical appearance due to improper use of steroids or calcineurin inhibitors.^{1,2} It was first coined by *Ive and Marks*.^{3,4} The typical dermatophyte infection presents as annular lesions with erythematous scaly border and central clearing. In TI, this later feature is not seen. Rosacea-like, psoriasiform and erythroderma-like presentation of TI have been described in the literature.^{5,6} The diagnosis is confirmed by isolation of dermatophytes by microscopic examination with potassium hydroxide (KOH) and fungal cultures. Systemic antifungal therapy is preferred over the topical antifungals.^{5,7}

CASE REPORT

A 15-year-old boy presented with 8 months history of persistent itchy skin lesion on his face. Patient used many topical treatments including steroid, but no improvement. Past medical history and systemic review were all unremarkable. Family history revealed history of atopic dermatitis in one of his siblings. Skin examination showed multiple well defined scaly patches and plaques on the right side of his face (Figure 1). Differential diagnosis included psoriasis, atopic eczema, contact dermatitis, and subacute lupus erythematosus. KOH microscopic examination and fungal culture revealed dermatophytes fungi. On the base of the above clinical and laboratory findings, a diagnosis of TI was made. Itraconazole 200 mg capsules once daily for 2 weeks was prescribed. The skin lesions disappeared completely (Figure 2).

DISCUSSION

Topical application of steroids may modify the presentation of the dermatophyte infection. TI on the face may mimic lupus erythematosus, rosacea, and contact dermatitis.⁵⁻⁸ The pathogenesis of TI is mostly due to a steroid-modified response of the host immunity to fungal infec-

Figure 1: Multiple Well Defined Scaly Erythematous Patches on the Right Side of the Face.



Figure 2: Face of the Patient Showing Post-inflammatory Hyperpigmentation after using Oral Itraconazole Capsules for 2 Weeks. Note the Acne Lesions that are Unrelated to this Case Report.



tion and not to a direct pharmacological effect on the fungus.⁵⁻⁹ Both Potent fluorinated and non-fluorinated topical steroids may produce TI.²⁻⁵ Arise of TI infection in recent years is partly due to an increasing number of patients who self-treat themselves with topical steroids that are obtained over the counter. More recently, a few cases of TI due to use of topical tacrolimus and pimecrolimus have been reported.^{2,5} *Trichophyton rubrum* is one of the most common anthropophilic dermatophyte throughout the world and the most frequently isolated dermatophyte in TI.^{3,6} Although localized dermatophyte infections respond well to topical antifungals agents, TI should be treated with oral antifungals. Terbinafin as well as the azoles like itraconazole and fluconazole are preferred over griseofulvin in treating TI.³⁻⁷

CONCLUSION

TI is a rare skin disease that presents as atypical dermatophytosis. The typical dermatophyte infection presents as annular lesions with active scaly borders and central clearing. It is a diagnostic challenge for dermatologist because it may mimic a variety of different dermatosis. A high index of suspicion is required for dermatosis that are unresponsive to topical immunosuppressants. TI should be confirmed by KOH microscopic examination and fungal culture to isolate dermatophytes. It is better to be treated by treated oral antifungals.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest that are directly relevant to the content of this review.

CONSENT STATEMENT

Consent has been taken from the patient for purpose of using patient's photographs for publication in print or on the internet.

REFERENCES

1. Romano C, Maritati E, Gianni C. Tinea incognita in Italy: A 15-year survey. *Mycoses*. 2006; 49: 383-387. doi: [10.1111/j.1439-0507.2006.01251.x](https://doi.org/10.1111/j.1439-0507.2006.01251.x)
2. Del Boz J, Crespo V, Rivas-Ruiz F, de Troya M. Tinea incognita in children: 54 cases. *Mycoses*. 2011; 54: 254-258. doi: [10.1111/j.1439-0507.2009.01810.x](https://doi.org/10.1111/j.1439-0507.2009.01810.x)
3. Rallis E, Koumantaki-Mathioudaki E. Pimecrolimus induced tinea incognita masquerading as intertriginous psoriasis. *Mycoses*. 2008; 51: 71-73. doi: [10.1111/j.1439-0507.2007.01436.x](https://doi.org/10.1111/j.1439-0507.2007.01436.x)
4. Rajpar SF, Abdullah A. Management of onychomycosis and awareness of guidelines among dermatologists. *Br J Dermatol*. 2006; 155: 1080-1082. doi: [10.1111/j.1365-2133.2006.07493.x](https://doi.org/10.1111/j.1365-2133.2006.07493.x)
5. Al Aboud K, Al Hawsawi K, Alfadley A. Tinea incognita on the hand causing a facial dermatophytid reaction. *Acta Derm Venereol*. 2003; 83(1): 59.
6. Crawford KM, Bostrom P, Russ B, Boyd J. Pimecrolimus-induced tinea incognita. *Skinmed*. 2004; 3: 352-353. doi: [10.1111/j.1540-9740.2004.03796.x](https://doi.org/10.1111/j.1540-9740.2004.03796.x)
7. Siddaiah N, Erickson Q, Miller G, Elston DM. Tacrolimus-induced tinea incognita. *Cutis*. 2004; 73(4): 237-238. Web site. <http://europepmc.org/abstract/med/15134322>. Accessed February 26, 2017.

8. Pustisek N, Skerlev M, Basta-Juzbasić A, Lipozencić J, Marinović B, Bukvić-Mokos Z. Tinea incognito caused by trichophyton mentagrophytes -- A case report. *Acta Dermatovenerol.* 2001; 9: 283.
9. Gupta AK, Prussick R, Sibbald RG, Knowles SR. Terbinafine in the treatment of majocchi's granuloma. *Int J Dermatol.* 1995; 34: 489. doi: [10.1111/j.1365-4362.1995.tb00619.x](https://doi.org/10.1111/j.1365-4362.1995.tb00619.x)