

TINEA INCOGNITO DUE TO *EPIDERMOPHYTON FLOCCOSUM*

Ali Zarei Mahmoudabadi¹, Zahra Mossavi²

Summary

Tinea incognito is a cutaneous infection with atypical clinical characteristics. Disease is usually caused by administration of steroids. We describe a 25-year-old man who presented with local lesion in groin being treated with corticosteroid. *Epidermophyton floccosum*, an anthropophilic species, was identified by mycological examinations, direct and culture.

KEY WORDS: Tinea incognito, Tinea cruris, *E. floccosum*.

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INTRODUCTION

Tinea incognito is an atypical dermatophytosis that is caused by prolonged use of topical or oral corticosteroids.¹ Disease is usually localized to groin area. Tinea cruris accounted for 7.6% of all dermatophytosis.² Several reports show that disease more prevalent in Iran.³⁻⁵ The highest frequency of tinea cruris is seen in 20-30 years olds suggesting that the peak of the infection is associated with age. We report a patient who had tinea incognito on his groin area caused by *E. floccosum* after topical corticosteroid application. *E. floccosum* is an

anthropophilic species that is distributed worldwide. It is responsible for most cases of tinea cruris in Iran.³⁻⁵

CASE REPORT

A 25-year-old man presented with 4-6 weeks history of scaling and pruritic lesion involving the groin. The patient had been misdiagnosed as psoriasis and treated with topical corticosteroid for several weeks. With this treatment the lesion initially improved, but later they persisted. Physical examination revealed erythematous scaling lesion with purple stretch marks (Fig-1).

Skin scrapings were collected using sterile scalpel. Direct examination from skin scrapings revealed septate branching mycelium with many arthroconidia (Fig-2). Collected skin scrapings were cultured on Mycobiotic agar (Difco, East Molesey, UK) slant tubes and incubated at 25-30°C for 3 weeks, aerobically. The colonies of *E. floccosum* were characterised by slow growing, gently folding, fuzzy to suede like in texture and khaki in colour. *E. floccosum* was confirmed in cultures based on the macroscopic and microscopic features. The 2-4 celled pyriform macroconidia were the most

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Fig-1: Tinea incognito due to *E. floccosum*

important features of *E. floccosum* (Fig-3). Macroconidia were abundant and arranged like bunches of bananas. Microconidia were absent. In the present study patient was successfully treated with topical clotrimazole (1% cream) three times daily for 3-4 weeks.

DISCUSSION

The typical clinical features of tinea cruris are presenting erythematous scaling lesions with a raised margin. Disease is usually bilateral. The application of topical steroids may modify the clinical picture. The term tinea incognito has been used to describe dermatophyte infections

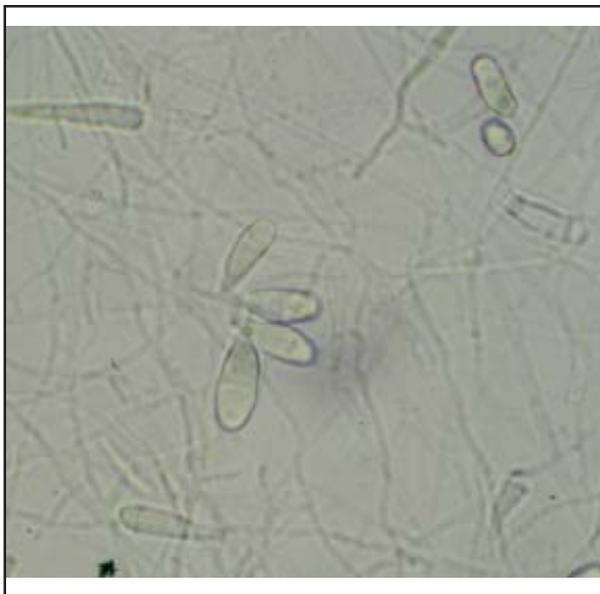


Fig-3: Microscopy of *E. floccosum*, pyriform macroconidia in group

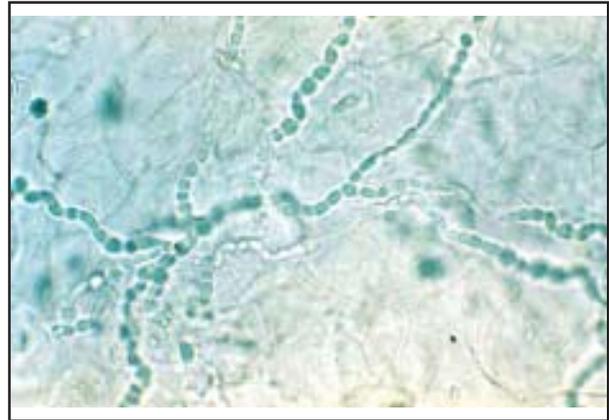


Fig-2: KOH preparation of skin scraping shows septate branching mycelium with arthroconidia

modified by corticosteroid treatment. Tinea incognito typically affects adults and it is seen on the groin,⁶ the face^{1,7-9} and on the dorsal of the hand,¹⁰ leg,^{7,11} arm^{7,11} and buttock and thigh.¹¹

Wacker et al.¹² has also reported one case of tinea incognito at the umbilical region caused by *M. canis*. Tinea cruris is mainly seen in men and it is seen more frequently in hot and humid environment. *E. floccosum* was reported as the most prevalent dermatophyte species isolated from tinea cruris in Iran.^{3,5} In others reports *T. rubrum* was the predominant etiologic agent followed by *E. floccosum*.² Gorani et al.⁹ and Sanchez-Castellanos et al.¹ have reported cases of dermatophytosis of the face due to *Microsporum canis* and *T. mentagrophytes* that was modified by a long-term application of topical corticosteroids, respectively.

Stretch marks are adverse effect of topical steroids in groins and axillae. In our patient classical features of tinea cruris was modified by application of topical corticosteroid. Sanchez-Castellanos, et al.¹ believe that topical steroids therapy can suppress the local immune response and allow the fungus to grow easily. As a result, the fungal infection may take on a bizarre appearance.

CONCLUSION

The tinea incognito presented in this report was initially misdiagnosed as psoriasis and treated with corticosteroids.

ACKNOWLEDGMENT

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