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DIFFERENTIATING VULGAR PSORIASIS AND TINEA INCOGNITO: CHALLENGES AND IMPLICATIONS FOR HEALTHCARE PROFESSIONALS

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ABSTRACT

Differentiating between vulgar psoriasis and tinea incognito presents a significant challenge for healthcare professionals due to their overlapping clinical manifestations. Both conditions exhibit erythematous and scaly lesions but differ fundamentally in etiology and treatment approaches. Psoriasis is a chronic autoimmune disorder requiring targeted therapies such as topical agents, phototherapy, and systemic medications. In contrast, tinea incognito, a fungal infection, necessitates appropriate antifungal treatments. Recent studies emphasize the critical need for accurate diagnosis, highlighting that a thorough clinical history, distinctive lesion characteristics, and laboratory tests—such as fungal cultures and skin biopsies—are essential to prevent misdiagnosis. The rising incidence of tinea incognito, often exacerbated by the inappropriate use of topical corticosteroids, illustrates the importance of recognizing its atypical manifestations and underscores the need for careful clinical assessment. Interdisciplinary collaboration among healthcare professionals, alongside continuous education, is vital for ensuring the proper identification and management of these dermatological conditions. This proactive approach can significantly reduce the risk of incorrect diagnoses and inappropriate treatments. Understanding the underlying mechanisms and clinical presentations of both vulgar psoriasis and tinea incognito is crucial for improving patient outcomes. It also highlights the importance of monitoring at-risk populations to promote more effective, evidence-based dermatological practices. Overall, a heightened awareness and comprehensive understanding of these conditions will facilitate better clinical decision-making, leading to improved patient care and enhanced management strategies for dermatological disorders.

Keywords: Vulgar Psoriasis. Tinea Incognito. Differential Diagnosis. Dermatological Conditions. Healthcare Professionals.

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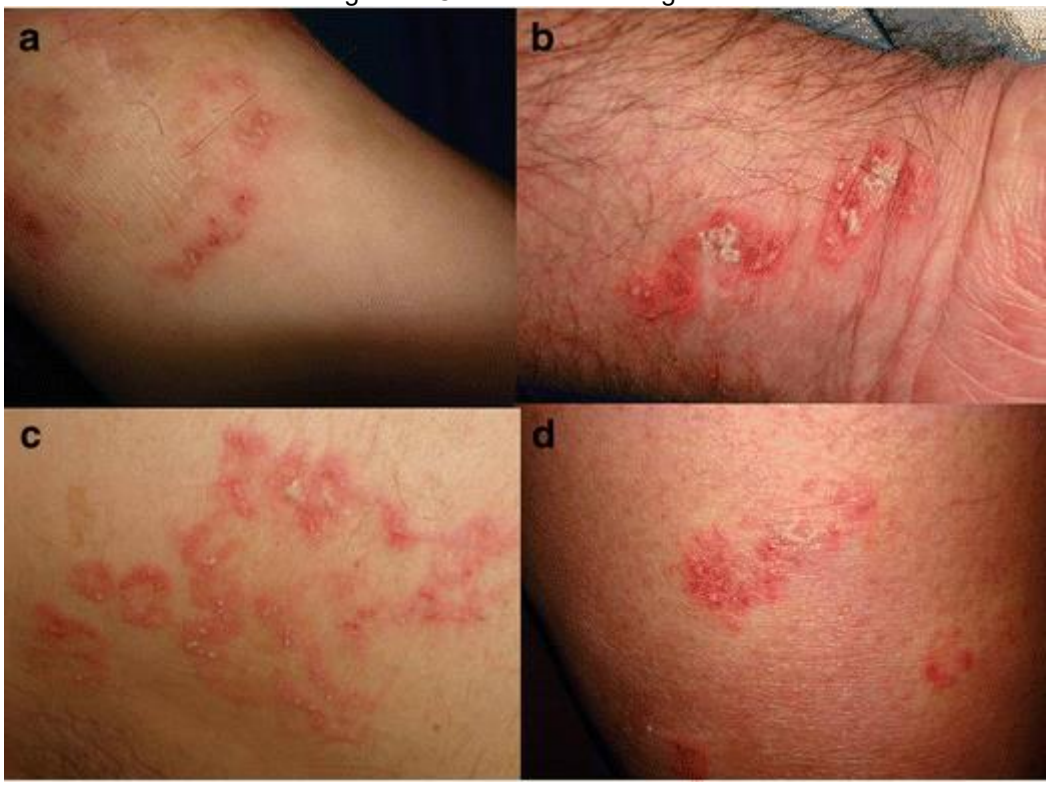
INTRODUCTION

Psoriasis vulgaris and tinea incognito are dermatological conditions that often exhibit overlapping clinical features, posing significant challenges for differential diagnosis among healthcare providers. Psoriasis vulgaris, a chronic autoimmune disorder, is characterized by the excessive production of skin cells, leading to well-defined, scaly, and erythematous lesions typically found on the elbows, knees, scalp, and lower back, often accompanied by itching. In contrast, tinea incognito is a fungal infection caused by dermatophytes, presenting as pruritic, erythematous, and scaly plaques. While psoriasis is an inflammatory condition that is non-infectious, tinea incognito is an infection; the similarities in their appearances, especially in intertriginous or trunk areas, can lead to misdiagnosis.

Figure 1: Cases of tinea incognito.



Source: Chang and Moreno-Coutiño (2016).

Accurate differentiation between these two conditions requires careful consideration of several factors, including the patient's medical history. For instance, psoriasis may have a genetic component, while tinea might arise from exposure to infected animals or damp environments. Key clinical features, such as the characteristic silvery scales of psoriasis, symmetrical lesion distribution, and response to topical therapies, can aid in distinguishing them. Laboratory investigations, including direct mycology or fungal cultures, are essential

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for confirming tinea diagnoses, while skin biopsies may help in identifying psoriasis and excluding other conditions.

The research by Tamer and Yuksel (2017) focuses on tinea manuum, a dermatophyte infection affecting the hands, often presenting with mild scaling and erythema. Chronic cases on the palms may show scaling and hyperkeratosis, predominantly affecting the dominant hand but potentially bilateral. "Tinea incognito" refers to dermatophyte infections that have altered presentations due to inappropriate steroid treatments. To establish a definitive diagnosis, clinicians may employ methods such as Wood's lamp examination, mycological cultures, direct microscopy, and advanced molecular techniques like polymerase chain reaction (PCR). Management typically involves the use of antifungal and keratolytic agents.

Another study by Betetto, Žgavec, and Suhodolčan (2020) examines tinea incognita, which can arise from the misuse of topical corticosteroids or calcineurin inhibitors, leading to atypical clinical presentations that complicate diagnosis. The rising incidence of these infections correlates with increased use of immunosuppressive medications and self-prescribed topical therapies. They report a case involving a 68-year-old male with a history of psoriasis, who presented with scaly erythematous lesions that failed to respond to conventional psoriasis treatments, ultimately diagnosed as tinea incognita through histopathological examination of a biopsy sample.

Additionally, Park et al. (2022) investigate facial tinea incognito, which is frequently misdiagnosed as other skin disorders. Their study retrospectively evaluated 38 mycologically confirmed cases, revealing a mean patient age of 59.6 years, with an eczema-like pattern being the most prevalent presentation. The average time from symptom onset to diagnosis was 3.4 months, with a high prevalence of chronic systemic diseases and concurrent tinea infections noted among patients. Mycological analysis identified Trichophyton rubrum as the predominant species, and dermoscopic examinations revealed common features like scales and dilated vascular patterns.

Dhaher (2020) further explores tinea incognito, focusing on its clinical and epidemiological aspects. In this study, 90 cases were analyzed, revealing a median age of 34 years and high rates of initial misdiagnoses, with many cases incorrectly identified as eczema or psoriasis. The majority of patients had previously used potent topical corticosteroids. Clinically, tinea incognito frequently mimics various skin conditions, emphasizing the importance of including it in the differential diagnosis of chronic erythematous scaly lesions unresponsive to standard treatments.

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Gisondi, Bellinato, and Girolomoni (2020) provide a comprehensive review of differential diagnoses for plaque psoriasis, which is characterized by well-defined, erythematous, and desquamative plaques. Their narrative review highlights the need for skin cultures and histological examinations to ensure accurate diagnosis, given that conditions like seborrheic dermatitis and tinea capitis can easily be confused with psoriasis.

Finally, Diruggiero (2020) presents a case of a 64-year-old Hispanic male with a long-standing severe psoriasis history who developed tinea incognito from topical corticosteroid use. Initially treated with systemic and topical antifungals, he later received broadalumab, an interleukin-17 receptor A antagonist. This treatment cleared the fungal infection within a month, yet psoriatic plaques persisted on a significant portion of his body. After three weeks of broadalumab treatment, the patient's pruritus resolved, and psoriasis involvement drastically decreased. This case highlights the critical role of physician assistants (PAs) and nurse practitioners (NPs) in monitoring long-term corticosteroid therapy for potential complications, as well as the necessity of distinguishing between tinea incognito and psoriasis for effective treatment.

Differentiating between vulgar psoriasis and tinea incognito poses a significant challenge for healthcare professionals, given the potential overlap in clinical manifestations. Both dermatological conditions can present with erythematous and scaly lesions, but they fundamentally differ in their etiology and treatment. Psoriasis, a chronic autoimmune disease, requires specific therapeutic approaches, including topical agents, phototherapy, and systemic medications, whereas tinea, a fungal infection, necessitates appropriate antifungal treatments.

Recent studies highlight the importance of accurate diagnosis, emphasizing that the patient's clinical history, the presence of distinctive characteristics in the lesions, and the use of laboratory tests such as fungal cultures and skin biopsies are crucial to avoid diagnostic errors. The increasing prevalence of tinea incognito, often exacerbated by the inappropriate use of topical corticosteroids, underscores the need for awareness of its atypical manifestations and the importance of a careful clinical approach.

Interdisciplinary collaboration and ongoing education for healthcare professionals are essential to ensure the proper identification and management of these conditions, thereby minimizing the risk of misdiagnoses and inadequate treatments. Understanding the underlying mechanisms and clinical presentations of both diseases will not only contribute to better patient outcomes but also reinforce the need for vigilance in at-risk populations, promoting a more effective and evidence-based dermatology.

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