Dermoscopy – a simple and rapid in vivo diagnostic technique for tinea incognito

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Abstract Tinea incognito resulting from corticosteroid abuse is becoming very common in the tropics. Its diagnosis is tricky owing to its confusing morphology, as well as practical and technical issues associated with mycological tests. Dermoscopy has now evolved as a novel diagnostic tool for diagnosing tinea incognito in such challenging situations, since the typical hair changes such as Morse-code hairs, deformable hairs, translucent hairs, comma and cork screw hairs, and perifollicular scaling may be seen despite steroid use, irrespective of mycological results.

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0365-0596/© 2019 Sociedade Brasileira de Dermatologia. Published by Elsevier España, S.L.U. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).
The however, dermatoscopy on corporis, house interdigitale topical therapeutic utility had been reported. Figure 1 Clinical image of tinea incognito lesion over the right axilla of a young male – minimally raised erythematous plaque with ill-defined borders, shiny surface with peripherally scattered, mildly scaly papules. Onset four months previously; history of intermittent application of steroid-antifungal cream and oral itraconazole intake.

Topical corticosteroid abuse not only renders therapeutic management challenging, it is contributing to the growing epidemic of antifungal therapeutic failure.\(^1\)\(^,\)\(^2\) The utility of dermoscopy in rapid diagnosis of tinea capitis is well-established.\(^2\) However, dermoscopic diagnosis of tinea corporis, especially the incognito variant, has been sparingly reported.\(^4\)

A 22-year-old medical undergraduate student presented with four-month-old itchy pinkish-red lesions in the right axilla. The lesion had ill-defined borders, and a shiny surface with peripherally scattered, mildly scaly papules (Fig. 1). He had been self-medicating with clobetasol-miconazole cream and oral itraconazole 200 mg/day, intermittently. Polarized dermoscopy revealed patchy erythema, perifollicular scales and casts, black dots, broken hairs, bent deformable hairs, Morse-code hairs, comma and cork-screw hairs, and translucent hairs; additionally, dotted vessels and telangiectasias were present (Fig. 2). These dermoscopic changes typify the tinea of non-glabrous skin.\(^2\)\(^,\)\(^3\)\(^,\)\(^4\) Skin scrapings were sent for fungal culture and showed septe branching hyphae on 10% KOH microscopy. Oral terbinafine 250 mg/day and topical ciclopirox olamine 1% cream for six weeks resulted in complete resolution. Trichophyton mentagrophytes var. interdigitale was confirmed on culture.

Altered morphology, logistic issues associated with in-house light-based microscopy, and time delay of fungal culture results warrant a rapid office tool like dermoscopy to diagnose tinea incognito.\(^1\)\(^,\)\(^2\) Fungal invasion of the hair leads to deformation and craking that present as translucent, deformable hairs, comma and cork screw hairs, and Morse-code hairs that show horizontal skip white bands (localized invasion).\(^3\)\(^,\)\(^5\) Dermoscopy serves as a noninvasive and simple method that allows speedy in vivo diagnosis of tinea incognito.

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Author’s contribution
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Conflicts of interest

None declared.

References