

Tinea corporis concealing Plaque psoriasis: A case report

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Abstract

A case of Tinea corporis concealing Plaque psoriasis was diagnosed at the Urban Health and Training Center (UHTC), Malvani slum, Malad (West), Mumbai, India. A 33 year old, Muslim male presented with complain of recurrent red itchy patch over chest since 3-4 years. A diagnosis of Tinea corporis was made and he was treated for the same at some other healthcare facility. The patient came to the UHTC because of persistence of his complains. On performing general examination of the patient, the treating doctor at the UHTC found nail pitting and subungual hyperkeratosis characteristic of plaque psoriasis. A probable diagnosis of Tinea corporis concealing plaque psoriasis was made and the patient was put on standard treatment; and referred to higher center for confirmation of diagnosis with skin biopsy. Through this novel case report, we wish to highlight that Tinea corporis may conceal plaque psoriasis and it is therefore important to be vigilant and perform thorough

general examination of the patient in order to ensure accurate treatment of the cause.

Keywords: Tinea Corporis, Plaque psoriasis, Skin diseases, Slum, Urban Health and Training Center.

Introduction

The prevalence of skin diseases has been reported to be highest amongst slums of developing countries. The most common conditions seen are fungal infections, scabies, eczema, acne, and pigmentation disorders. Infective conditions are known to exceed non-infective conditions¹.

Tinea corporis is a superficial fungal skin infection of the body caused by dermatophytes. The dermatophytes of genera Trichophyton, Epidermophyton, and Microsporum are known to cause Tinea corporis². Other factors responsible for Tinea corporis^{2&3}:

- Excessive heat,
- High relative humidity,
- Fitted clothing.

- Patients with low defensin beta 4,
- Underlying diseases such as diabetes mellitus, lymphomas, immunocompromised status, Cushing syndrome, excess sweating, or old age.

Dermatophytoses is treated using local or systemic antifungals and anti-histaminics⁴.

Psoriasis is an immune-mediated inflammatory disease, involving skin and joints. Plaque psoriasis is the commonest clinical type. Features of Plaque psoriasis⁵:

- Large oval-circular plaques over the scalp, trunk and extensor body surface;
- Pitted keratolysis,
- Onycholysis,
- Splinter hemorrhages,
- Subungual hyperkeratosis,
- Oil spot/salmon patch).

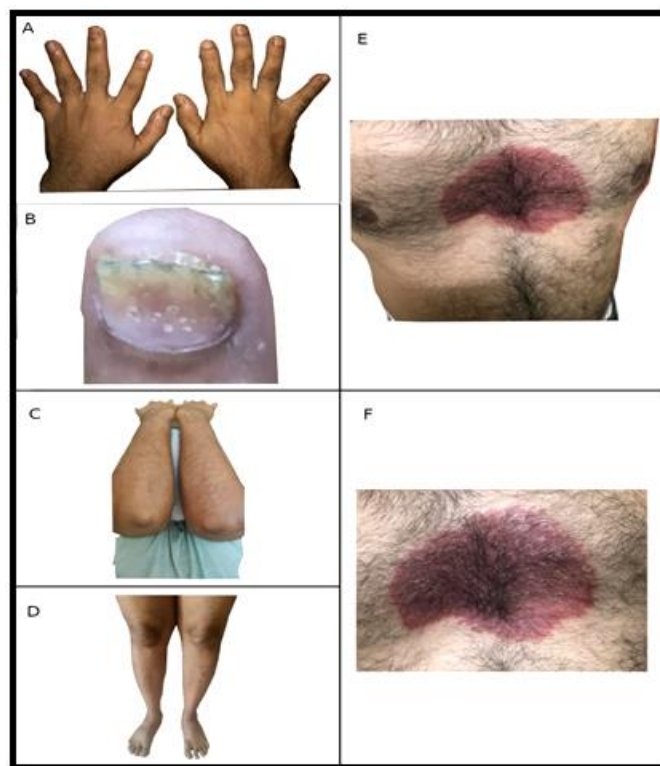
Psoriasis has a multifactorial etiology: genetic predisposition, risk trauma, infection, drugs, metabolic factors, stress, alcohol, smoking, and sunlight. Plaque psoriasis is treated with topical emollients and moisturizers, corticosteroids, keratolytics, tar, anthralin, vitamin D3 analogs, calcineurin inhibitors and photochemotherapy (psoralen with UVA (PUVA). The treatment response rates vary widely⁶.

Psoriasis has to be differentiated from tinea corporis and eczema, since it may coexist in rare cases⁷.

Case Report

A 33 year old, Muslim male came to the general outpatient department of the Urban Health Training Center, Malvani slum, Malad (West), Mumbai, India, in June 2021; with the complains of recurrent red itchy patch over chest since 3-4 years. On general examination, nail pitting characteristic of psoriasis along with subungual hyperkeratosis was observed (Image. A and B). Lesions of psoriasis which have classic predisposition to extensor aspects of the elbows and knees were not seen in this

case (Image C and D). On local examination, a solitary irregular uniformly red patch with raised scales was found, strikingly suggestive of Tinea Corporis (Image. E and F). Counseling regarding maintaining proper personal hygiene and avoiding tight fitting clothes was done. Blood investigations were done to rule out anemia, diabetes, and hypothyroidism. We treated him with T. Levocetirizine 5mg (once at night for a week), T.Terbinafine 250 mg (twice daily for a two weeks) and gave Mometasone furoate 0.1% ointment for local application; and referred to higher centre for further management. Tinea corporis along with plaque psoriasis was confirmed on skin biopsy and the same treatment was continued for two more weeks. The patient improved with the treatment over a period of about 1 year, and follows up regularly at the UHTC.



Discussion

The cause for Tinea corporis in this case report was attributed to the surrounding environmental conditions-high relative humidity and tight fitted clothes. Since,

infectious skin diseases are more prevalent in slum area¹, non-infectious diseases like psoriasis could be missed resulting in incomplete treatment. Tinea corporis is one of the differential diagnoses for Plaque psoriasis and can also exist together⁷; it is therefore important to perform thorough general examination so that systemic signs suggestive of either of the conditions are not missed. The same fact is highlighted through this case report.

Conclusions

Non infectious diseases may be missed, especially in slum areas, because of the established fact of exceeding prevalence of infectious diseases over the noninfectious ones. Tinea corporis may conceal plaque psoriasis and it is therefore important to be vigilant and perform thorough general examination of the patient in order to ensure accurate diagnosis and prompt treatment of the cause.

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Abbreviations: UHTC: Urban Health Training Center.

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