

Original Research Paper

Dermatology

PATTERNS OF DERMATOPHYTOSIS - A PROSPECTIVE STUDY

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ABSTRACT

Aim: To observe the different patterns of dermatophytosis

Patients and methods: A total of 100 patients with untreated dermatophytosis were included in this study. All the

patients were subjected to:

- Complete history
- General and dermatological examination
- Clinical photographs
- Skin scrapings

Results: Of the 100 patients in our study, 39 patients showed a combination of tinea corporis and tinea cruris which was succeeded closely by tinea corporis.

Conclusion: Tinea corporis and tinea cruris synchronizing together was the most common presentation and our study also showed a male predilection. Tinea corporis was the commonest type irrespective of any concomitantly occurring other site involvement.

KEYWORDS: Dermatophytosis, Tinea corporis, Tinea cruris

Introduction

Dermatophytosis also known as tinea or ringworm is a superficial cutaneous fungal infection seen in all age groups with no gender predilection. There are various patterns depending on the area of the body affected.

Methods:

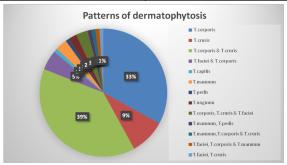
Our study involved a total of 100 patients who presented to our OPD with untreated dermatophytosis. All the patients were subjected to a detailed history and clinical examination. Clinical photographs were taken and skin scrapings were done to confirm the diagnosis. A verbal and written consent was obtained from the patient after ethical clearance.

Results:

Of the 100 cases studied, 56 were male and 44 were female (male predilection) between the ages of 1 year 6 months and 77 years. Many patients showed multiple site involvement with Tinea corporis/ Tinea cruris being the commonest combination with a total of 39 patients (39%) followed closely by Tinea corporis alone with 33 patients (33%). The other patterns and combinations that the patients presented with, in order of frequency were tinea cruris with 9 patients, tinea faciei/tinea corporis(5), tinea manuum(3) and tinea corporis/tinea cruris/tinea faciei (3). Tinea unguum and Tinea capitis had 2 patients each; Tinea pedis; Tinea manuum with Tinea pedis; Tinea manuum with Tinea corporis and Tinea cruris; Tinea faciei with Tinea corporis and Tinea cruris had 1 patient each. Tinea corporis occurring alone or in combination was the commonest type, with 82 patients presenting with the same.

Pattern/Combination	Number of patients
Tinea corporis/Tinea cruris	39
Tinea corporis	33
Tinea cruris	9
Tinea faciei/Tinea corporis	5
Tinea manuum	3
Tinea corporis/T.cruris /T.faciei	3
Tinea unguum	2
Tinea capitis	1
Tinea pedis	1
T.manuum/T.pedis	1

T.manuum/T.corporis/T.cruris	1
T.faciei/T.corporis/T.manuum	1
T.faciei/T.cruris	1



Discussion:

Dermatophytosis is a common, keratinophilic¹, fungal infection caused by the dermatophytes² - Trichophyton, Epidermophyton and Microsporum. The infection is common in tropical areas³ with increased humidity and host factors like sweating, diabetes and HIV play a role in aggravating the condition⁴. Trichophyton causes infection of the skin, hair and nail while Microsporum and Epidermophyton cause infection of the skin/hair and skin/nail respectively.

Depending on the site of involvement, there are various patterns of dermatophytosis.

Tinea faciei	Face
Tinea barbae	Beard
Tinea capitis	Scalp and hair
Tinea unguium	Nails
Tinea manuum	Hands
Tinea cruris	Groin
Tinea pedis	Feet
Tinea corporis	Rest of the body

The commonest patterns that are appreciated are Tinea corporis⁵ and Tinea cruris⁶.

The common species causing dermatophytosis are Trichophyton rubrum⁷, T. mentagrophyte⁷, T.violaceum⁷, Microsporum canis⁸, M.Equinum⁸ and Epidermophyton floccosum.

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Clinically, the classical lesions are annular or polycyclic erythematous plaques with papules at the periphery and central clearing.

Investigations $_9$ include skin scrapings with $_{10}\%$ KOH for skin and $_{40}\%$ KOH for hair and nails in which long, slender, septate hyphae with arthrospores can be appreciated as well as fungal culture with SDA medium

Differential diagnosis include erythrasma, psoriasis, granuloma annulare, Hansen's in reaction, intertrigo, eczema, herald patch of pityriasis rosea and figurative erythemas.

Treatment includes topical antifungals₁₀ like clotrimazole, sertaconazole, eberconazole and oral agents like itraconazole, terbinafine and griseofulvin. Topical therapy should be applied twice a day, 2 cm beyond the lesions for at least 2 weeks beyond the resolution of lesions₁₁.

CONCLUSION:

Our study showed a predominance of tinea corporis and tinea cruris occurring concomitantly, followed closely by tinea corporis with a predilection for the male population. Overall, 82 of our patients presented with Tinea corporis, either alone or in combination with another type, making it the most prevalent type.

Figure 1: Tinea corporis



Figure 2: Tinea faciei



Figure 3: Tinea manuum



Figure 4: Tinea pedis



Figure 5: Tinea unguium



Figure 6: Tinea capitis



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