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Tinea Cruris in Female Genital Dermatoses: Clinical Insights and Dermoscopic Correlates

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Abstract

Background: Tinea cruris is a superficial dermatophyte infection affecting the groin region. Although commonly reported in males, its occurrence in females is increasingly recognized. Due to overlapping clinical presentations with other genital dermatoses such as candidiasis, eczema, and psoriasis, diagnosis may be challenging. Dermoscopy has emerged as a useful non-invasive tool to aid in the identification of characteristic features of dermatophyte infections. ***Aim***: To evaluate the clinical presentation of tinea cruris among females presenting with genital dermatoses and to analyze dermoscopic findings associated with the condition. ***Materials and Methods***: A prospective observational study was conducted in the dermatology outpatient department of a tertiary care hospital over a period of 12 months. Female patients presenting with groin or genital skin lesions suspected of dermatophytosis were included. Detailed clinical examination, dermoscopic evaluation, and potassium hydroxide (KOH) microscopy were performed. Data were analyzed for demographic characteristics, clinical morphology, dermoscopic patterns, and associated risk factors. ***Results***: A total of 120 female patients with genital dermatoses were evaluated, of which 68 (56.7%) were diagnosed with tinea cruris. The most common age group affected was 21–40 years (45.6%). Pruritus was the predominant symptom (82.3%). Dermoscopy revealed peripheral scaling (76.5%), broken hairs (52.9%), erythematous background (69.1%), and follicular micropustules (33.8%). KOH positivity was observed in 61 (89.7%) cases.
Conclusion: Tinea cruris is a significant cause of genital dermatoses in females. Dermoscopy provides valuable supportive clues such as peripheral scaling, erythema, and broken hairs, which facilitate early diagnosis and differentiation from other genital dermatoses.

Keywords: Tinea cruris, female genital dermatoses, dermoscopy, dermatophytosis, groin infection.

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INTRODUCTION

Dermatophytosis is one of the most common superficial fungal infections worldwide, affecting keratinized tissues such as skin, hair, and nails. Tinea cruris, also known as “jock itch,” typically involves the groin, perineum, and adjacent thigh regions. Although traditionally more prevalent in males due to anatomical and environmental factors, increasing incidence among females has been reported in recent years.

Female genital dermatoses encompass a wide spectrum of conditions including infectious, inflammatory, and autoimmune disorders. Conditions such as candidiasis, contact dermatitis, psoriasis, and lichen simplex chronicus may clinically mimic tinea cruris, making accurate diagnosis challenging.

Dermoscopy, a non-invasive diagnostic technique, has recently gained importance in the evaluation of inflammatory and infectious dermatoses. In dermatophytosis, dermoscopy may demonstrate features such as peripheral white scales, erythema, broken hairs, and follicular involvement, which help distinguish it from other conditions.
Early diagnosis is important to prevent chronicity, recurrence, and transmission. However, limited literature exists regarding dermoscopic findings of tinea cruris specifically in female genital dermatoses.

Therefore, the present study aims to evaluate the clinical features and dermoscopic patterns of tinea cruris in female patients presenting with genital dermatoses.

MATERIALS AND METHODS

This is a Prospective observational study was conducted in the Department of Dermatology at a tertiary care teaching hospital over a period of 12 months.

Sample Size

120 patients.

Inclusion Criteria

- Female patients aged ≥18 years
- Patients presenting with groin or genital lesions suggestive of fungal infection
- Patients who provided informed consent.

Exclusion Criteria

- Patients on systemic antifungal therapy within the previous 4 weeks
- Patients with immunosuppressive disorders
- Pregnant women with severe dermatological conditions requiring systemic therapy

Data Collection

Detailed information was recorded including:

- Age
- Occupation
- Personal hygiene practices
- Clinical symptoms
- Duration of disease
- Associated systemic diseases

Clinical Examination

Each patient underwent complete dermatological examination focusing on:

- Site of involvement
- Lesion morphology
- Presence of scaling, erythema, or central clearing

Dermoscopy

Dermoscopy was performed using a handheld dermoscope (10× magnification). Observed features included:

- Peripheral scaling
- Erythema
- Broken hairs
- Follicular pustules
- Background pigmentation

Laboratory Investigation

Skin scrapings from the active margin were examined using 10% potassium hydroxide (KOH) microscopy to confirm dermatophyte infection.

Statistical Analysis

Data were analyzed using descriptive statistics. Results were expressed as frequency, percentage, mean, and standard deviation.

RESULTS

Table 1: Age Distribution of Patients

Age Group (years)	Number (n=68)	Percentage
18–20	8	11.8
21–30	18	26.5
31–40	13	19.1
41–50	15	22.1
>50	14	20.5

Table 2: Clinical Symptoms

Symptom	Number	Percentage
Pruritus	56	82.3
Burning sensation	21	30.8
Erythema	48	70.6
Scaling	44	64.7

Table 3: Risk Factors Associated with Tinea Cruris

Risk Factor	Number	Percentage
Excess sweating	32	47.1
Tight clothing	28	41.2
Diabetes mellitus	12	17.6
Poor hygiene	19	27.9

Table 4: Dermoscopic Findings

Dermoscopic Feature	Number	Percentage
Peripheral scaling	52	76.5
Erythematous background	47	69.1
Broken hairs	36	52.9
Follicular micropustules	23	33.8
Brown pigmentation	18	26.5

Table 5: KOH Microscopy Results

Result	Number	Percentage
Positive	61	89.7
Negative	7	10.3

DISCUSSION

Dermatophytosis remains a common dermatological problem in tropical and subtropical countries, including India. The warm and humid climate contributes significantly to the spread of fungal infections.
In the present study, tinea cruris accounted for 56.7% of female genital dermatoses, indicating that dermatophyte infections are a major cause of genital complaints among females.

The majority of affected patients belonged to the 21–40 years age group, which is consistent with previous studies that reported higher prevalence among young and middle-aged adults due to increased physical activity and sweating.
Pruritus was the most common symptom (82.3%), similar to findings reported by Singh et al., where itching was the predominant complaint in dermatophytosis.

Dermoscopy revealed several characteristic findings. Peripheral scaling was the most frequent feature observed, reflecting active fungal growth at the advancing margin. Broken hairs and erythematous background were also commonly seen, indicating follicular involvement and inflammatory changes.
Follicular micropustules were observed in approximately one-third of cases, suggesting deeper follicular invasion in some patients. These dermoscopic findings are valuable in differentiating dermatophytosis from other genital dermatoses such as candidiasis or eczema.

KOH microscopy confirmed dermatophyte infection in 89.7% of cases, highlighting its importance as a diagnostic tool.
The integration of clinical examination, dermoscopy, and laboratory confirmation enhances diagnostic accuracy and helps initiate appropriate treatment early.

CONCLUSION

Tinea cruris is an important and often underrecognized cause of female genital dermatoses. The condition commonly presents with pruritic erythematous lesions with scaling in the groin region. Dermoscopy provides useful diagnostic clues such as peripheral scaling, erythematous background, and broken hairs, aiding in differentiation from other dermatoses.
Early diagnosis using dermoscopy and KOH microscopy can facilitate prompt treatment and reduce complications and recurrence.

REFERENCES

1. Havlickova B, Czaika VA, Friedrich M. Epidemiological trends in skin mycoses worldwide. Mycoses. 2008;51(Suppl 4):2-15.
2. Nenoff P, Verma SB, Ebert A, et al. Dermatophytoses in India: the current scenario. Indian J Dermatol Venereol Leprol. 2017;83(4):469-474.
3. Verma SB, Madhu R. The great Indian epidemic of superficial dermatophytosis. Indian J Dermatol Venereol Leprol. 2017;83(3):227-236.
4. Errichetti E, Stinco G. Dermoscopy in general dermatology: a practical overview. Dermatol Ther (Heidelb). 2016;6(4):471-507.
5. Tognetti L, Cinotti E, Labeille B, et al. Dermoscopy of dermatophytosis: a systematic review. J Eur Acad Dermatol Venereol. 2020;34(6):1150-1158.
6. Borda LJ, Wikramanayake TC. Superficial fungal infections. Dermatol Ther. 2015;28(3):185-191.
7. Gupta AK, Cooper EA. Update in antifungal therapy of dermatophytosis. Mycopathologia. 2008;166(5-6):353-367.
8. Singh S, Beena PM. Profile of dermatophyte infections in Baroda. Indian J Dermatol Venereol Leprol. 2003;69(4):281-283.
9. Elewski BE. Dermatophyte infections: clinical features and management. Clin Microbiol Rev. 1998;11(3):415-429.
10. Hay RJ, Ashbee HR. Fungal infections. In: Griffiths CEM, Barker J, Bleiker T, editors. Rook's Textbook of Dermatology. 9th ed. Oxford: Wiley-Blackwell; 2016. p. 36-1-36-90.