Topical Eberconazole for the Treatment of Recalcitrant Tinea Cruris Morphologically Modified

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Dermatophytosis is one of the commonest infections in India, with tinea corporis and tinea cruris accounting for a significant proportion of individuals.[1]

Moreover, tinea imbricata, also known as Tokelau, is also a dermatophytic infection caused by *Trichophyton concentricum*.[2] Another clinical entity that falls under this category is tinea pseudoimbricata, having "ring-within-a-ring" appearance. It is named so for its resemblance with tinea imbricata.[1]

This review highlights the case of a patient with tinea cruris along with tinea imbricata treated effectively with topical eberconazole cream and oral terbinafine.

CASE PRESENTATION

A middle-aged male presented with scaly lesions in the groin area associated with severe itching since the past 1 year.

History

He had consulted a general practitioner who advised a topical steroid with antifungal combination (beclomethasone and clotrimazole) on and off along with oral fluconazole 150 mg weekly for 6 weeks.

As there was some improvement in the lesions, the patient discontinued the medicine for few months.

However, similar lesions reappeared in the groin area since the past 4 months and he was again started on combination of the above-mentioned medicines along with clotrimazole powder and oral terbinafine, but there was no response.

Examination

On examination, the lesions in the groin were scaly, annular with raised borders and had one more concentric raised erythematous lesion within the first one (Figs. 1 and 2).

Moreover, the patient had icthyotic skin in other parts of the body. At some places, lesions were slightly ill-defined.

Sensation over the lesion was intact. General physical examination, vitals and systemic examination were normal.

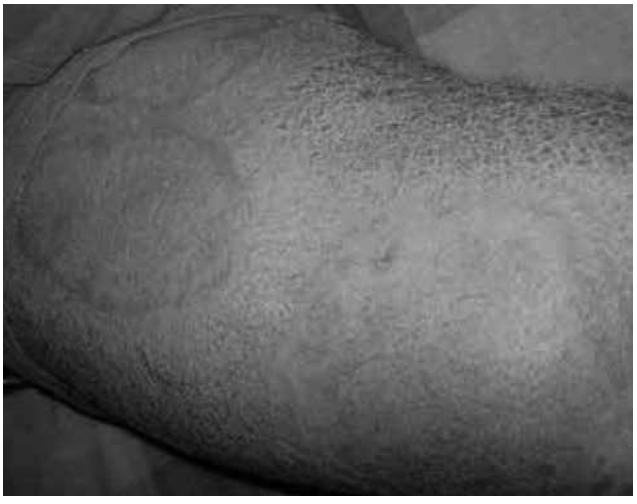

Figure 1. Erythematous annular patch over inguinal region and thigh.

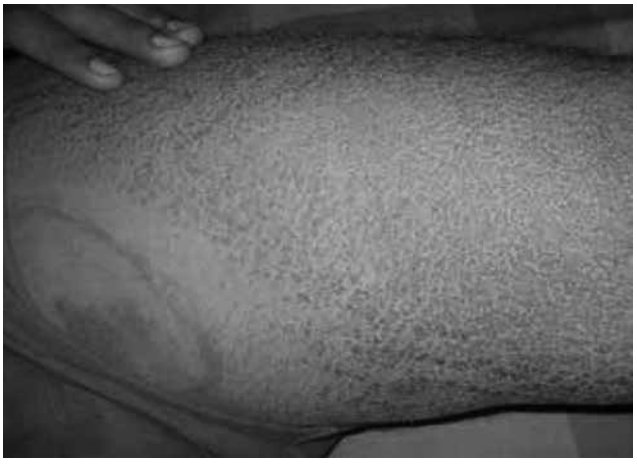

Figure 2. Lesion showing concentric circles one within the other.

Investigations

- Routine investigations were within normal limits.
- Scraping for potassium hydroxide (KOH) mount was positive for fungus.

Diagnosis

- The patient was diagnosed with tinea cruris along with tinea imbricata.

Management

After confirming the diagnosis, the patient was prescribed topical eberconazole cream 1% to be applied twice daily and oral terbinafine 500 mg/day for 2 weeks.

On follow-up visit after 2 weeks, significant clinical improvement was noticed and the therapy was well-tolerated.

Topical eberconazole was then continued for another 2 weeks, which led to complete resolution of the lesions.

DISCUSSION

Eberconazole, an imidazole derivative is a broad-spectrum antifungal agent. It causes structural and functional changes by preventing fungal growth via inhibition of ergosterol (a key component of the fungal cytoplasmic membrane) synthesis.

It acts by inhibiting lanosterol 14α-demethylase enzyme which plays an important role in the formation of 14α-methyl sterols, precursor of ergosterols.[3]

Evidence-based observations are available to suggest the efficacy of this agent against dermatophytic infections.

According to a phase II pilot study, use of eberconazole cream 1% in patients who had mycologically proven tinea corporis and tinea cruris was found to be effective in 87% patients who applied it once daily and in 93% patients who applied it twice daily.[4]

In addition, eberconazole possesses anti-inflammatory property that makes it different from other imidazoles and a drug of choice for treating inflamed dermatophytic infections.[3]

Furthermore, many studies have also shown promising outcomes of oral terbinafine in the treatment of dermatophytic infections such as tinea cruris.[5]

CONCLUSION

Fungal resistance because of topical steroid needs special measures like increase of dosage, combination of systemic antifungals or prolonged therapy. Resistance is dealt with topical and systemic therapy.

Two systemic antifungals with one topical fungistatic and fungicidal preparations are ideal for the present day of treating recalcitrant/resistant fungal infection. It has been observed that eberconazole displays high potential in the treatment of dermatophytosis. In this case, use of topical eberconazole was associated with favorable outcomes and successful management of the patient with tinea cruris along with tinea imbricata.

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