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STUDIES

COMPARATIVE STUDY OF ORAL VERSUS TOPICAL KETOCONAZOLE THERAPY IN PITYRIASIS VERSICOLOR

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28 adult patients of pityriasis versicolor were treated with either oral ketoconazole (13 patients) or topical ketoconazole (15 patients). Though mycological responce was equal in both the regimes, good clinical responce was seen in 69.23% of patients on oral ketoconazole while 73.33% of patients on topical ketoconazole, with least side effects seen with topical ketoconazole. Therefore topical ketoconazole appears to be better than oral ketoconazole in the treatment of pityriasis versicolor.

Key Words : Pityriasis versicolor, Ketoconazole

Introduction

Superficial mycotic infections account for 15-20% of new cases in tropics and subtropics.[1] Of these pityriasis versicolor (PV) is very common. PV, caused by the lipophilic yeast *Malassezia furfur* is mild, chronic infection of the stratum corneum, with a higher prevalance in warm elimates.[2] Of the various modalities of antifungals used against it, ketoconazole is a newer broad spectrum agent of imidazole group, which can be used both topically and systemically. But when used systemically it has got some side effect which may be serious enough. So this study was done with an intention of comparing and observing the relative efficacy of systemic versus topical ketoconazole therapy in PV.

Materials and Methods

A total of 28 adult patients were taken in this study. Each case was examined clinically and in Wood's light, diagnosis was corroborated with KOH smear examination. At random 13 patients were given oral ketoconazole (200 mg/day) half an hour before breakfast, and 15 patients were given topical 2% ketoconazole once a day after bath. Duration of therapy varied berween 14 and 21 days depending upon the clinical and mycological response. Each patient was followed up weekly, clinical and mycological responses were recorded as below :

Clinical response :

'P' - Poor (no response or deterioration)

'M' - Marked (some persistence of symptoms with persistence of some component of lesion or incomplete clearance)

'G' - Good (subsidence of symptoms with complete clearance of lesion)

Mycological response :

'P' - Positive in KOH smear

'M' - KOH negative

Negative KOH was considered as 'Cure'.

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Table I. Therapentic response

Response	Systemic ketoconazole		Topical ketoconazole	
	Clinical response	Mycological response	Clinical response	Mycological response
P	00	00	00	00
M	4 (30.77%)	00 (0%)	4 (26.67%)	00 (0%)
G	9 (69.23%)	13 (100%)	11 (73.33%)	15 (100%)

Results

All the 28 patients were KOH positive at the begining of the therapy. The series comprised of 21 males and 7 females. Clinical and mycological response is shown in the table I and duration of therapy required has been shown in the table II. Some side effects like gastric intolerance, headache and raised alkaline phosphatase level which came down to normal after completion of the therapy were noted in patients taking oral ketoconazole. But no significant adverse effects were noted with topical ketoconazole.

Table II. Duration of therapy required

Type of regimen	Duration	
	14 days	21 days
1. Oral ketoconazole	8 patients (61.54%)	5 patients (38.46%)
2. Topical ketoconazole	10 patients (66.66%)	5 patients (33.34%)

Discussion

In this study mycological responce was equally good (100%) in both regimens, although cure was achieved earlier with the topical therapy. But in case of clinical cure topical therapy was found good in 73.3% whereas 69.23% in oral therapy. Shafi and Khatri reported 88% cure rate after 2 weeks of oral ketoconazole therapy.[3] Kaur et al got 96.6% cure after 10 days with the same.[4] Savin et al reported 79% cure rate with topical ketoconazole. In comparison to 69% with oral ketoconazole.[5] We also have observed a better result with topical therapy although recurrence was noted in 2 patients (13.33%). In case of oral therapy recurrence was noted in 1 patient only (7.61%). Further better patient compliance may be more with topical therapy because of its earlier clinical cure. This topical therapy is also cost effective which is an important determinant in our developing country where the prevalance of PV is more and socioeconomic status is lower. Therefore it can be concluded that topical therapy may become the first choice in the management of PV.

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