

COMPARATIVE STUDY OF KETOCONAZOLE AND ITRACONAZOLE IN PITYRIASIS VERSICOLOR

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Forty patients with pityriasis versicolor were treated with either oral ketoconazole, 200mg per day for 5 days (20 patients) or oral itraconazole, 200mg per day for 5 days (20 patients). On global assessment after 2 weeks, 17 (85%) out of 20 patients treated with oral ketoconazole were cured while 3 cases had considerable residual lesions. In oral itraconazole-treated group, 19 (95%) out of 20 patients were cured and one case still had considerable residual lesions. No significant difference was observed in response rates in the two groups. Relapse occurred in 3 patients of ketoconazole group and 1 patient of itraconazole group during the follow-up period of 4 months.

Key Words : Ketoconazole, Itraconazole, Pityriasis versicolor

Introduction

Tinea versicolor is a chronic, superficial fungal infection caused by *Malassezia furfur* which is a component of normal skin flora in 90 - 100% of adults living in tropical areas.¹

Most patients require treatment as spontaneous remission is uncommon. However, patients can experience considerable difficulty in regularly applying the available creams or lotions which may be odorous and messy and associated with high recurrence rates. Oral imidazole derivatives with broad spectrum antifungal activity have offered an effective, easily administered and rapid treatment alternative.²⁻⁷

The aim of the present study was to compare the efficacy and relapse rate of systemic ketoconazole and itraconazole therapy in patients with pityriasis versicolor.

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Materials and Methods

Forty patients with extensive pityriasis versicolor were taken for the study. After a detailed history and clinical examination, the diagnosis was confirmed by KOH and Wood's lamp examination. Patients who received systemic or topical antimycotic treatment within a month of the start of study and those who had serious concomitant illness or associated dermatophyte infections were not selected for the study.

Twenty patients were treated with oral ketoconazole, 200mg per day for 5 days, and the other 20 patients with oral itraconazole, 200mg per day for 5 days. Clinical assessment in terms of erythema, scaling and pruritus was made on a scale of 0-3 (3-severe, 2-moderate, 1-mild, 0-absent) at each visit. At the end of two weeks, clinical response was assessed globally with the use of broad scale of healed, mild residual disease, considerable residual disease, not changed and deteriorated. Patients with assessment in top two categories i.e. healed (clini-

cally and mycologically after another 2 weeks and thereafter at monthly intervals for another 3 months. Adverse effects if any were recorded. In each case, liver function tests were done before and after 1 week of start of treatment.

Results

The two groups were similar with respect to sex and age. Clinical assessment of symptoms showed no significant difference between both treatment groups at any visit with respect to changes in the mean scores for erythema, scaling and pruritus. After 2 weeks of start of treatment, 17 (85%) and 19 (95%) patients of ketoconazole and itraconazole groups, respectively, had healed completely, clinically as well as mycologically. Fisher’s exact test showed no significant difference in response rates between the 2 groups. Table-I shows the results of global

Table I. Global Assessment of treatment after two weeks

Parameters	Number of patients	
	Ketoconazole	Itraconazole
Cured		
Healed	17	19
Mild residual disease	-	-
Considerable residual disease	3	1
Unchanged	-	-
Deteriorated	-	-
Total	20	20
Percentage of cured (healed & mild residual disease)	85%	95%
p-value	>0.05	

assessment of treatment after 2 weeks.

Seventeen (85%) of 20 patients treated with oral ketoconazole were cured while 3 (15%) patients had considerable residual disease. In itraconazole group, 19 (95%) patients were cured and 1 patient had considerable residual disease. Fisher’s exact test showed no significant difference in global assessment between two groups after 2

weeks of start of treatment.

Relapse was noted in 3 (15%) patients of ketoconazole group and 1 (5%) patient of itraconazole group during the follow up period of 4 months. Only two patients had mild nausea and dizziness on starting treatment with oral ketoconazole which subsided by itself. In both the groups, values for the various biochemical parameters to assess liver functions were within normal limits before and after the treatment.

Discussion

Imidazole derivatives are widely used for the treatment of pityriasis versicolor in different dosage regimes and with varying cure and relapse rates.²⁻⁷

Shafi and Khatri² reported 88% cure rate after 2 weeks of oral ketoconazole therapy and Kaur et al³ gave 96.6% cure rate after 10 days with the same. The cure rate with oral ketoconazole, 200mg/day for 5 days, in our study, was 85% which is almost similar to the cure rates of previous studies.^{2,3} Similarly, Hay and Midgeley⁴, in their study, reported no significant differences in the cure and relapse rates with regimes of 200mg oral ketoconazole per day for 5, 15 and 25 days and proposed that a 5 day therapy may be used for the majority of patients with pityriasis versicolor.

Biggio et al⁵ reported more than 90% cure rate, after 3 weeks of therapy, with oral itraconazole 200mg once daily for 5 days while Robertson⁶ observed 90% cure rate after 2 weeks of completion of treatment with 200mg oral itraconazole once daily for 5 days. Panconesi et al⁷ reported 92% cure rate after 4 weeks of treatment completion, with oral itraconazole 200mg/day for 5 days and showed that patients treated with 200mg once daily rather than 100mg twice daily for 5 days had a faster response to therapy and a greater recovery rate, however, differences

between the 2 schedules were not statistically significant. In our study, cure rate of 95% was achieved, on assessment after 2 weeks of completion of therapy, with oral itraconazole, 200mg daily for 5 days, which is quite similar to the cure rates of previous studies.⁵⁻⁷

Results of the present study suggested that the efficacy of oral ketoconazole, 200mg daily for 5 days, and oral itraconazole, 200mg daily for 5 days, is almost similar in the treatment of pityriasis versicolor. Both the drugs are equally well tolerated and safe.

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