FLUCONAZOLE AND ITRACONAZOLE IN PITYRIASIS VERSICOLOR

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Pityriasis versicolor is a common superficial fungal infection caused by Malassezia species. It has a high incidence and prevalence in tropical climates. Although it responds well to treatment, relapses and recurrences are frequent. In the present study the therapeutic response of single dose fluconazole (400 mg) with itraconazole (100mg twice daily x 7 days) was compared in sixty patients of pityriasis versicolor. No significant statistical difference (p>0.05%) was observed between efficacy of two drugs. Therapy with fluconazole is preferable in view of single dose administration and lesser cost as compared to itraconazole.

Key words : Pityriasis versicolor, Imidazoles, Fluconazole, Itraconazole

Introduction

Pityriasis versicolor has a wide geographic distribution; its most extensive and severe manifestations are observed in warm and humid tropical climates.[1] The aetiological agent, Malassezia furfur (rarely M.globosa or M.sympodialis), an opportunistic lipophilic yeast becomes pathogenic under suitable conditions to cause the disease. Various topical and systemic antipityrosporal agents like imidazoles, selenium sulphide, zinc pyrithione etc. have shown promising results in treatment of this disease despite frequent recurrences after completion of therapy.[1,2] Newer oral triazole antifungal agents, itraconazole and fluconazole are both effective in variable dosage schedules.[3-6] The present study evaluates the efficacy of these two drugs in pityriasis versicolor used as short term therapy.

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Materials and Methods

Sixty (60) patients with extensive pityriasis versicolor were included in the study (n=30 for fluconazole), n=30 for itraconazole). The demographic data of these patients are given in Table I. The diagnosis was based on clinical picture and demonstration of Malassezia (mycelia and yeast) in 10% KOH preparation from scraped lesions. Patients with positive smears only were included in the study.

Patients having other concomitant fungal infections, chronic liver or renal disease or those who had been on oral or topical antifungal drugs in the preceding one month were not included in the study. Pregnant or lactating mothers were also excluded.

The patients in fluconazole group received a single dose of the drug (400mg) shortly after breakfast while patients in itraconazole group were given 100mg capsule twice daily after meals for 7 days. Patients returned for follow up at 4 weeks. A repeat KOH examination was performed at 4 weeks after completion of treatment in

each group. For comparison, patients were categorised into three groups:

a. 'Global cure'- asymptomatic + KOH negativity

b. 'Clinical cure' - asymptomatic + KOH positivity

c. 'Non-responder' - symptomatic + KOH positivity

Symptoms and signs assessed were scaling and pruritus. Persistence of hypopigmentation in presence of mycological negativity was disregarded and did not affect the assessment of results. Complete blood counts, hepatic, renal function tests and urinalysis were performed pre-treatment and at 4 weeks of completion of treatment. Patients were enquired about any untoward effects of the treatment.

Table I. Dermographic data of 2 groups of patients

	Fluconazole	Itraconazole
No. of patients (men/women)	30 (17/13)	26 (16/10)
Median age in years (range)	24.2 (12-46)	27.1 (19-52)
Duration of infection in months (range)	3.4 (1-7)	3.0 (1.2-6)

Results

Of 60 patients who entered the study, 56 were available for assessment at 4 weeks of completion of treatment. Global cure was observed in 18 (60%) patients in fluconazole group and in 19 (73.07%) patients in itraconazole group (Table II). Clinical cure was observed in 11 (36.6%) patients with fluconazole and in 7(26.9%) patients with itraconazole. When compared statistically, difference between efficacy of the drugs was not significant (P>0.05). Three (10%) patients in fluconazole group and 4 (15.3%) patients in itraconazole group complained of transient mild gastrointestinal upsets. There was no change in laboratory parameters before and after 4 weeks of completion of treatment.

Table II. Assessment at 4 weeks of the completion of the treatment

Fluconazole	Global cure	Clinical cure	Non responder
(n = 30)	18 (60%)	11 (36.6%)	1 (3.4%)
Itraconazole (n=26)	19 (73.08%)	7(26.92)	0

Discussion

Pityriasis versicolor can be successfully treated with topical or systemic therapy. It is generally regarded that systemic treatment is reserved for extensive disease or repeated recurrences or relapsing disease. Topical treatment is time consuming, difficult to carry out by the patient himself (as back is the most common site involved) and leads to incomplete treatment with a few areas always remaining without application of medication. Further, the topical treatment does not affect the excessive colonization of pityrosporum yeasts in asymptomatic areas which may be responsible for recurrences or relapses.

A relatively safe systemic therapy even for a milder disease will help achieve better control of the disease. Both ketoconazole and itraconazole have been given for 5-10 days for pityriasis versicolor with equal efficacy.[6-8] Even a single dose ketaconazole has been tried,[8] but later doubted for its efficacy in further studies.[9]

In the present study, single dose of fluconazole 400 mg was found to be equally effective as compared to itraconazole 200mg twice daily for 7 days. No untoward effects were noted with either treatment. Cost effectiveness was in favour of fluconazole. Mycological negativity was achieved in higher percentage of patients with itraconazole (73.07%) as compared to fluconazole (60%) and no nonresponders were seen. With itraconazole having only marginal benefit over fluconazole, the single dose therapy with fluconazole was observed to be preferable to one

week therapy with itraconazole.

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