SHORT COMMUNICATIONS

ITRACONAZOLE VERSUS GRISEOFULVIN IN THE TREATMENT OF TINEA CORPORIS AND TINEA CRURIS

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126 patients (82 males and 44 females) aged above 12 years, suffering from tinea corporis and/or tinea cruris, were treated with either itraconazole (100 mg once a day for 2 weeks and then plecebo for 2 weeks) (63 patients), or griseofulvin (250 mg twice a day for 4 weeks). 90.47% of the patients treated with itraconzole improved whereas griseofulvin imporved 76.19% of patients, clinically. Mycological response was 72% with itraconazole and 57% with griseofulvin.

Key Words : Tinea corporis, Tinea cruris, Itraconazole, Griseofulvin

Introduction

Infection of the skin by dermatophytes is a common problem. The distribution of tinea is world wide, but its incidence is higher in tropics and subtropics.[1] Since its introduction in 1958, griseofulvin has remained the mainstay of treatment for dermatophytosis. With the introduction of new triazole compounds, antifungal therapy has gained a new momentum. Itraconazole is a triazole with a potent antifungal spectrum (4-10 times greater than ketoconazole) and is the ideal treatment for dermatophytes, candida etc.[2] In this present study efficacy of itraconazole was compared with that of griseofulvin in cases of tinea corporis and tinea cruris in 126 patients.

Materials and Methods

Total 126 patients of more than 12 years of age with the complaints of tinea corporis or cruris or both, proved either by 10% KOH smear or by culture or by both, were taken for the study. Patients, who had taken any treatment, had any previous history of intolerance to the drugs under study, had any abnormality in the laboratory investigation or who were pregnant, were excluded. After taking detailed history, total haemogram, urinalysis, liver function tests, renal panel, blood sugar (random) were done before and after the study. Along with this 10% KOH examination and culture in the Sabouraud's media of the material from the lesions was done at the begining and end of the study. 63 patients chosen at random were given griseofulvin 250 mg with meals twice a day for 4 weeks and another 63 patients were given itraconazole, 100 mg orally once a day with meal for 2 weeks followed by placebo for another 2 weeks. Patients were followed up weekly and their clinical symptoms e.g., itching, burning, oozing etc were noted and rated as follows:

0, Not present

1, Present, but not distinct

2, Present and distinct

3, Very marked

Patients with scores 0 and 1 were held as clinically cured and those with scores 2 and 3 were assumed still affected. Results were compiled at the end of 4th week and patients were followed up in 6th week again.

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Results

There were 82 males (65%) and 44 females (35%). Maximum patients (62%) belonged to 21-40 years age group (Table I).

Table I. Age distribution of patients

Age (years)	Male	Female	Total
11 - 20	18	8	26 (20.6%)
21 - 30	27	13	40 (31.7%)
31 - 40	26	16	42 (33.3%)
41 - 50	8	1	9 (7.2%)
51 and above	3	6	9 (7.2%)
	82 (65%)	44 (35%)	126 (100%)

Tinea corporis alone was found in 44 (35%), tinea cruris alone in 49(39%) and mixed tinea corporis and tinea cruris were found in 33(26%) patients. Duration of infection is shown in the table II.

Table II. Duration of the disease

Duration	No. of patients
0 - 4 weeks	55 (43.7%)
4 - 8 weeks	44 (35.0%)
> 8 weeks	27 (21.3%)
	126 (100%)

Itraconazole showed a clinical cure rate of 90.47%, whereas griseofulvin showed 76.19%; similarly mycological cure was found in the form of negative KOH smear and culture in 72% in case of itraconagole and 57% in griseofulvin (Table III).

Table III. Response to treatment

Drugs	No. of patients			Clinical cure (%)		Mycological cure (%)
	T. corporis	T. cruris	Mixed			
Total Itraconazole	25	22	16	63	90.47	72
Responded	25	21	11	57		
Total Griseofulvin	19	27	17	63	76.19	57
Responded	12	23	13	48		

Discussion

The study showed a clear superiority of the itraconazole over the griseofulvin. Clinical improvement in patients treated with itraconazole occurred in 90.47%. Similar results of improvement were obtained by Pariser et al[3] (96%), by Degreef et al[4] (87%), by Panconesi et al[5] (96.6%) and De Doncker et al[6] (82%). Roberts has opined that it is superior to griseofulvin and ketoconazole in resistant dermatophytosis.[7]

Study by Cauwenbergh et al[8] has shown that itraconazole,in contrast to griseofulvin and ketoconazole, is extensively excreted in the sebum, apart from some excretion in the sweat and is incorporated in the basal layer. This later route gives a constant delivary of itraconazole to the skin surface even 3-4 week after the end of the treatment. Here mycological cure was obtained in 72% of cases at the end of the therapy. There may be increase in the cure rate after few more weeks, as the drug will be there even after the stoppage of treatment.[3] Thus it may be concluded that itraconazole is a better drug against dermatophytes.

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