ONE WEEK THERAPY WITH ORAL TERBINAFINE IN CASES OF TINEA CRURIS/CORPORIS

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We conducted a study on 27 patients (17 males, 10 females) to evaluate the efficacy of oral Terbinafine on a short term basis. All the patients had clinical and mycologically proven tinea cruris I corporis. Each patient was given 250 mg Terbinafine (Lamisil) after meals, once daily for one week. Patients were followed up for 6 weeks after completion of treatment. Patients were assessed clinically and mycologically at the end of treatment and the end of the follow up period. The signs and symptoms of the disease had almost disappeared at the end of the follow up period. Mycological investigations were negative in all patients at this time, except for one. As reported in other studies, our results show that one-week oral therapy with 250 mg/day of Terbinafine is effective and cheap for the treatment of tinea corporis/cruris.

INTRODUCTION

The incidence of fungal infections of skin is on the increase, probably due to over use of very potent antibiotics, antineoplastic agents, and the increased incidence of immune deficiency states. Fungal infections can respond satisfactorily to various topical agents, but in cases where large areas of the body are involved or there are chronic or recurrent cases, systemic therapy is mandatory, especially in immunocompromised patients.

Terbinafine (Lamisil) is a new antifungal agent, which is the first orally active member of the allylamine class. It has been found to be fungicidal both in vivo and in vitro, and its fungicidal action stems from its highly specific inhibition of squalene epoxide, an enzyme involved at an early stage of fungal ergosterol synthesis. The pharmacokinetic profile of terbinafine is such that therapeutically effective concentrations are quickly achieved in the stratum corneum after either topical or oral administration and remain for a considerable period after treatment is stopped. Since Terbinafine is comparatively an expensive drug, we have tried to determine the lowest effective dose of Terbinafine.

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The cost of treatment in a country like ours plays an important role, as many are not in a position to afford expensive drugs, and that also for longer periods. Tinea cruris/corporis have been treated effectively with two weeks oral Terbinafine.

The aims of the present study were to evaluate the efficacy and tolerability of 1-week treatment with oral terbinafine in cases of tinea cruris/corporis.

MATERIALS & METHODS

Twenty-seven patients (17 males, 10 females; mean age 24 years) with mycologically proven tinea corporis/tinea cruris were enrolled in the study. 18 patients had tinea corporis and 9 patients had tinea cruris. A thorough examination of the skin lesions was done before the start of treatment, noting the various characteristics. At the end of the treatment, the patients were examined again. Each patient was recalled at 3 and 6 weeks after cessation of therapy, as was the case in previous studies.

The signs and symptoms were recorded in each patient before the start of therapy. The signs and symptoms were as follows. Erythema, scaling, pruritus, vesiculation, pustulation and crusting, in different combinations, in different patients.

The patients were assessed mycologically before the start of treatment, at the end of the treatment, and at the end of the follow-up period. Direct microscopy was done using potassium hydroxide to see the fungal hyphae. As a rule, culture should have been done to identify the various dermatophytes, but we could not do it in our study due to certain limitations.

The patients included in our study were otherwise healthy, without history of any major ailments, but still a full blood count and liver and kidney function tests were performed before the start of therapy, in many of our patients. In our study, not a single patient had taken any specific systemic antifungal therapy. A few had used various topical creams and ointments and of course many had used systemic antihistamines. In case of topical therapies, those patients were told to wait for a period of 7 to 10 days, before starting with Terbinafine.

Two tablets of 125 mg Terbinafine (Lamisil) were given to each patient daily after meals for a period of 1 week. Younger patients were given dosage according to their age. Patients were advised not to use any topical or systemic antimicrobials during the course of study. Adverse events reported by the patient were noted. Most of the patients tolerated the systemic therapy, apart from a few with minor side effects.

RESULTS & CONCLUSIONS

The patients were assessed at the end of the treatment and at the end of the follow up period i.e. 6 weeks. At the end of the treatment we were able to see almost all the patients. At the end of the follow up period, there were about 7 drop outs. The patients which we followed up had marked improvement as regard their signs and symptoms. The erythema, scaling, pruritus, vesiculation, pustulation and crusting had improved considerably. The improvement was maximum at two weeks, after cessation of therapy.

Most of the patients included in our study had multiple lesions, with only two patients with single lesions. Most of the patients still had visible lesions at the end of treatment. After 6 weeks of follow up period, all the lesions in 19 patients had resolved apart from one case with Tinea cruris, who still had visible signs and complaints about his disease.

At the end of the follow up period 19 patients were mycologically cured. As mentioned earlier one patient still had signs of the disease even mycologically.

As cultures were not performed, we were not able to tell about the species involved. The species normally involved in Tinea cruris and Tinea corporis are *Ep. floccosum, T. interdigitale, Trichophyton rubric, T. violaceum, T. mentagrophytes & T. verrucosum*, though all known dermatophytes can produce lesions of the glabrous skin.

In the final evaluation it was found the Terbinafine is well tolerated, has high cure rates, short duration of therapy and is safe.

DISCUSSION

Topical imidazole's are effective in many dermatophyte infections, but in cases of larger areas of involvement, the patients do not find topical therapy convenient. The dermatomycosis which does not respond to topical therapy, or is extensive or chronic, is preferably treated with systemic antifungals. There are systemic therapies available for dermatophytid infections of the skin, but the cheaper ones have low cure rates, with high rates of relapse.

A mycological cure rate of about 86 has been reported with two weeks' therapy with oral Terbinafine. Almost all newer antifungal drugs are very expensive, as compared to the older ones. In a country like ours, where most of the patients cannot afford expensive therapies, we have tried to reduce the duration of treatment, making the treatment cheaper, and of course have taken care not to overlook the effectiveness of therapy.

As reported earlier, our study does support one-week therapy with Terbinafine using 250 mg daily, in cases of Tinea cruris/corporis. High concentrations of Terbinafine have been recorded in the stratum corneum after oral administration; in addition to that, slow elimination half-life indicates that after cessation of oral therapy, concentrations high enough to maintain the antifungal activity of Terbinafine persist for 2-3 weeks.

In conclusion, 1-week therapy with oral Terbinafine can be considered highly effective in treatment of tinea cruris/corporis.

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