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Ketoconazole® in *Trichophyton rubrum*

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Abstract. 10 patients with *T. rubrum* infection were treated with Ketoconazole® 200–400 mg a day for 8 weeks. All patients had a skin infection and 2 in addition infection of the toe nails. Previous treatment with Griseofulvin and at least two different antifungal topicals had been ineffective. The infection was evaluated by clinical findings and mycological examination. The skin lesions disappeared in 6 patients, while none of the nail lesions were cured. However, at a follow-up 2 months after the end of the Ketoconazole treatment, recurrence was observed in 3 of 6 patients. It is suggested that Ketoconazole treatment of previously resistant *T. rubrum* infection should be continued for more than 2 months.

Key words: Ketoconazole®; Dermatophytosis; *Trichophyton rubrum*

Ketoconazole®, a new imidazole derivative with a broad *in vitro* antifungal activity, has been found to be effective in the treatment of dermatophytoses in which earlier treatments were without result (6). Its

primary mechanism of action is effected by the blocking of enzymes, resulting in cell membrane defects (3).

T. rubrum infections often present therapeutical difficulties and we therefore decided to try Ketoconazole in patients with *T. rubrum* infections in which earlier treatments, both topical and systemic, had not been followed by cure.

MATERIAL AND METHODS

Ten patients, 8 males and 2 females, aged 31–58 years (mean: 44.5) with *T. rubrum* skin infections participated. Two patients had concomitant infection of the toe nails.

Mycological examination was carried out before and at the end of the treatment period and at a follow-up examination 2 months later. Specimens from the lesions were microscopically examined immediately and cultured on Sabouraud agar, potato agar, corn meal agar and urea agar for further identification of the pathogen.

All patients had earlier been treated with at least two topical antifungal preparations as well as Griseofulvin for more than 2 months.

The dose of Ketoconazole was 200 mg/day for 2 months. If no improvement was seen after one month, the dose was increased to 400 mg/day for the next month. No other antifungal treatment was given during that treatment period.

The patients were seen at 2-weekly intervals, when the clinical picture was evaluated and any side effects were noted.

Laboratory tests concerning liver, kidney and bone marrow function were performed before and at the end of the study.

RESULTS

In 7 patients the dose was maintained at 200 mg/day, while it was increased in 3 patients because of unsatisfactory effect.

At the end of the study 5 patients were cured, as evaluated by clinical and mycologic examination. Four patients still had their fungal infection and in one the fungus had disappeared from the skin, but could still be isolated from the nails.

At follow-up after 2 months only 3 patients were still in remission, while *T. rubrum* was isolated from the remaining 7 patients, all having clinical signs of infection.

Ketoconazole was well tolerated by all but one patient who claimed a mild nausea. Taking the tablet at bedtime prevented this side-effect.

DISCUSSION

In earlier studies *T. rubrum* affection of the skin responded well to treatment with Ketoconazole (1,

4). Botter and co-workers treated their patients until clinical cure or for at least 6 weeks, using 200 mg/days, and found a beneficial effect in all of 4 patients with previously resistant *T. rubrum* infection. However, no follow-up study was reported (1). Side effects from Ketoconazole seem to be few (2), although signs of hepatotoxicity have been demonstrated (5). In our study the fungus could not be found in the skin in 6 of 10 patients at the end of the treatment period, but at a follow-up examination 2 months later a relapse was demonstrated in 3 of these 6 patients. The relapse occurred in patients treated with Ketoconazole 200 mg/day as well as 400 mg/day, and thus seems to be unrelated to the dose.

Our finding of 50% relapse within 2 months in the patients with an initial response may indicate that a treatment period of 8 weeks is too short in this type of patient.

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Venereal Disease in Patients with Scabies: A Five-year Survey

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Abstract. Over a 5-year period, 946 patients with scabies were offered venereological examination. 234 women and 436 men were examined and a prevalence of 8% gonorrhoea in women and 1.4% in the men was found. Neither unknown cases of syphilis nor chancroid nor lymphogranuloma venereum were found. As the 8% incidence of asymptomatic gonorrhoea in women is significantly higher than in routinely examined patients, we consider that female scabious patients are high-risk group for asymptomatic gonorrhoea.

Key words: Scabies; Venereal disease

Over the past 16 years it has been customary in the Dermatology Clinic at the Municipal Hospital in Copenhagen to offer a complete venereological examination to all men with scabies. From May 1974 both sexes have been examined, when ever possible.

We decided to make a 5-year follow-up investigation to test the benefit of venereological examinations in scabies patients, as this procedure is not a routine in Denmark.

MATERIALS AND METHODS

From 1974 to 1979, 946 patients, 387 women and 559 men all over 14 years of age, admitted to our clinic with an itching skin disease and having had a living scabies mite demonstrated by needle extraction, were offered a full examination including anogenital inspection. Cultures were taken from the urethra, rectum, tonsils and in the women from the cervix, to be tested for *Neisseria gonorrhoea*. Blood samples were examined for syphilis.

RESULTS

1. *Gonorrhoea*

670 patients, 234 women and 436 men, consented to be examined, the majority belonging to the age group 15–35 years.

18 women, equivalent to 8% (confidence limit 95%: 4–11%) and 6 men, equivalent to 1.4% (confidence limit 95%: 0.5–3%) had gonorrhoea. All the