# KETOCONAZOLE THERAPY IN PITYRIASIS VERSICOLOR

## M Shafi and M L Khatri

Twenty six cases having pityriasis versicolor, were treated with 10 and 14 day courses of oral ketoconazole. Cure rate was higher with the 14-day schedule than with the 10-day schedule. Recurrence was observed in one patient. No significant side effect was noticed except in one patient who developed intolerable nausea after the first dose.

Key words: Pityriasis versicolor, Ketoconazole.

Pityriasis versicolor is a superficial infection of the skin, caused by Malassezia furfur.1 Climatic factors contribute to its high prevalence in tropical and subtropical areas. There are many ways of treating it, using a wide range of topical antifungal agents like Whitfields ointment, imidazoles, tolnaftate, selenium sulphide shampoo and zinc pyrithione shampoo. These topical preparations are quite effective but the patients often experience the inconvenience of application over a large area of the body for a long period. In some cases with extensive involvement, results of topical treatment are not satisfactory and recurrences are frequent. Recently, oral ketoconazole therapy has been tried successfully for such cases.6,7

We are reporting results of oral ketoconazole therapy in cases of pityriasis versicolor with extensive involvement.

## Materials and Methods

Twenty six patients having pityriasis versicolor, confirmed by direct microscopy and Wood's lamp examination, were selected for this study, from March 1985 to December 1985. The criteria for selection of cases were, extensive involvement, long duration, poor response to previous topical treatment and frequent recurrences.

The treatment schedules consisted of: (1) Ketoconazole 200 mg/day for 10 days in 10 patients, (2) Ketoconazole 200 mg/day for 10

From the Department of Dermatology, Central Hospital and Faculty of Medicine, Al-Fateh University, Tripoli, Libva.

Address correspondence to : Dr. M. L. Khatri.

days, along with local selenium sulphide shampoo 2.5% bi-weekly in 10 patients, (3) Ketoconazole 200 mg/day for 14 days in 4 patients, and (4) Ketoconazole 200 mg/day for 14 days, along with local selenium sulphide shampoo 2.5% bi-weekly in 1 patient.

Routine laboratory investigations including liver function tests, blood urea and serum creatinine were performed before and after completion of the treatment. The patients were asked to report for follow up at the end of two weeks, one month and three months.

### Results

Of the 26 patients, 19 were males and 7 females, having their ages between 13 and 56 (mean 24.5) years. The duration of the disease was 1-10 years (mean 2.6 years). Sixteen patients had frequent recurrences.

All the cases were seen after 2 weeks and four weeks of starting the treatment, while only 17 patients were available for follow up upto 3 months. Clinical and mycological cure was observed in 22 (88%) after 2 weeks, 21 (84%) after 1 month, and 16 (94%) out of 17 patients after 3 months (Table I).

Residual hypopigmentation was seen in 17 (68%), 14 (56%) and 8 (47%) patients after 2 weeks, 1 month and 3 months respectively. One of the patients showed recurrences thrice after 2 weeks of stopping ketoconazole.

Cure rate was better with 2-week therapy than with 10-day treatment. Further, the results were better with combination therapy (oral ketoconazole with local selenium sulphide shampoo).

		Number of patients with a follow up of								
Schedule of treatment		2 weeks			1 month			3 months		
		Total	mycolo-	Residual hypopig- mentation	Total	mycolo-	Residual hypopig- mentation		Clinical & mycological cure	Residual hypopig- mentation
1.	Ketoconazole 10 days	10	8	6	10	7	4	8	7	4
2.	Ketoconazole 10 days with topical treatment	10	9	7	10	9	6	6	6	3
3.	Ketoconazole 14 days	4	4	3	4	4	3	2	2	1
4.	Ketoconazole 14 days with topical treatment	1	1	. 1	. 1	1	1	1	1	
_	Total	25	22	17	25	21	14	17	16	8

Table I. Response to treatment with various schedules.

One of the patients developed intolerable nausea after the first dose of ketoconazole, hence the treatment was discontinued. We did not observe any significant side effect or alteration in the laboratory tests, in the remaining 25 patients.

#### Comments

Response to oral ketoconazole therapy in our cases was favourable as also reported by Borelli.6 Hay and Midgeley7 did not find any difference in the cure or relapse rate with 5, 15 and 25 day regimes of ketoconazole, while the present study indicates a higher cure rate after 14 day regime than the 10 day regime. The combination of local treatment (selenium sulphide shampoo 2.5%) with systemic ketoconazole has a still higher cure rate in our study. Like the previous studies,6,7 we have also observed recurrences which is the main problem in the management of pityriasis versicolor. In our study, 12% of the patients did not show clinical or mycological cure. Probably these patients may respond to a longer course of therapy as indicated in a previous study.6 The adverse effects of ketoconazole have usually been recorded after a long course of therapy, generally more than a month.8 Our patients did not show any side effect except the one who developed intolerable nausea, after the first dose.

#### References

- Faergenann J and Fredrikson T: Tinca versicolor: Some new aspects on etiology, pathogenesis, and treatment, Intern J Dermatol, 1982; 21: 8-11.
- Albright SD and Hitch JM: Rapid treatment of tinea versicolor with selenium sulphide, Arch Dermatol, 1966; 93: 460.
- 3. Gip L: The topical therapy of pityriasis versicolor with clotrimazole, Postgrad Med J, 1974; 50: 59.
- 4. Fredrikson T: Treatment of dermatomycoses with topical miconazole (Daktar), Opuscule Medica, 1977; 21: 80.
- Faergenann J and Fredrikson T: An open trial of the effect of zinc pyrithione shampoo in tinea versicolor, Cutis, 1980; 25: 667.
- 6. Borelli D: Treatment of tinea versicolor with ketoconazole, Rev Inf Dis, 1980; 2:592-595.
- 7. Hay RJ and Midgeley G: Short course ketoconazole therapy in pityriasis versicolor, Clin Exp Dermatol, 1984; 9: 571-573.
- 8. Hanifin J: Adverse reactions, in: Ketoconazole in the Management of Fungal Diseases, Editor, Levine HB: Adis Press, Australia, 1982; p 156.