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Original Research

A Hospital Based Study on effect of 2% Ketoconazole in Pityriasis Versicolor

Vineet Kumar[1], Rekha S[2], Jitendra Acharya[3]

[1,2]Senior Resident, Department of Dermatology, Venereology and Leprosy, S.P. Medical College Bikaner, Rajasthan, India; [3]Senior Demonstrator, Department of Dentistry S.P. Medical College Bikaner, Rajasthan, India

ABSTRACT:

Introduction: Pityriasis versicolor is a frequent cutaneous fungal infection caused by lipophilic yeast Malasezia Furfur. The aim of our study was to assess the efficacy of ketoconazole 2% in a shampoo base in the treatment of pityriasis versicolor. Pityriasis versicolor (PV) is a widespread cutaneous fungal infection and caused by the lipophilic yeast Malassezia furfur . It is characterize by distinct scaly, discoloured or hypopigmented macules mainly on the upper trunk, proximal extremities and face. **Material and methods:** We enroll Fifty clinically diagnosed patients attend opd of department of skin &V.D.L. at s.n.medical college Jodhpur of pityriasis versicolor in the study. The signs and symptoms in the form of scaling, itching, erythema and hypo or hyperpigmentation were noted in each patient. **Results**: Fifty patients were enrolled in the study. Out of 36 males and 14 were females, Age ranged from 20 years to 40 years. Average duration of problem was 3 months (1 month – 6month). All the patients had hypopigmented macules and scaling; 13 patients complained of mild itching which worsened after sweating. **Conclusion**: The shampoo was applied daily for 15 days and found to be very efficient in clearing the Pityriasis Versicolor. There were no side effects. Ketoconazole 2% shampoo was shown to be highly effective and well tolerated for the treatment of PV, with significant reduction in scaling and elimination of the causative agent.

Key words: Pityriasis versicolor, ketoconazole, Malassezia furfur.

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Corresponding Author: Dr. Vineet Kumar, Senior Resident, Department of Dermatology, Venereology and Leprosy, S.P. Medical College Bikaner, Rajasthan, India

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INTRODUCTION:

Pityriasis versicolor (PV) is a widespread cutaneous fungal infection[1] and caused by the lipophilic yeast Malassezia furfur . It is characterized by distinct scaly, discoloured or hypopigmented [2] macules mainly on the upper trunk, proximal extremities and face. There were so many topical antifungal creams available for its treatment, but so difficult to apply creams to such a wide body surface area. A possible solution to this is provided by the development of ketoconazole (2%) in a shampoo base and [3] applications of the shampoo appear to clear most infections. Also[4, 5] the usefulness of oral ketoconazole in PV is well documented. The present study was conducted to evaluate the efficacy of ketoconazole 2% shampoo in the treatment of PV.

MATERIAL AND METHODS:

We enroll Fifty clinically diagnosed patients attend opd of department of skin &V.D.L. at s.n.medical college Jodhpur of pityriasis versicolor in the study. The signs and symptoms in the form of scaling, itching, erythema and hypo or hyperpigmentation were noted in each patient. Exclusion criteria included patients who had other skin problems, use of systemic and/or topical corticosteroids and antifungals, preceding 2 weeks. The patients were asked to apply ketoconazole 2% shampoo, was left in place for 10 minutes and then washed thoroughly. All adverse events that occurred during the study were recorded. The patients were evaluated after 15 days. On follow up almost 90% of clinical signs and symptoms were cleared.

RESULTS:
Fifty patients were enrolled in the study. Out of which 36 males and 14 were females, Age ranged from 20 years to 40 years. Average duration of problem was 3 months (1 month – 6month). All the patients had hypo pigmented macules and scaling; 13 patients complained of mild itching which worsened after sweating. The lesions were distributed mainly on upper back, shoulders, neck and chest. No patients showed hyper pigmented lesions or erythema. After 15 days, itching and scaling subsided in all, while there was approximately 90% less in hyper pigmentation. Three patients complained of mild irritation and pruritus after shampoo application on lesional sites, which lasted for half an hour and then subsided.

DISCUSSION:
Only some trials have been tried for ketoconazole 2% shampoo in PV. In earlier studies, ketoconazole 2% shampoo was shown to be highly effective and well tolerated for the treatment of PV, with significant reduction in scaling and elimination of the causative [6,7]agent Lange et al concluded that ketokonazole 2% shampoo, used as a single application daily for 3 days, is safe and highly effective in the treatment of PV. This study also corroborates the same for fifteen days application regimen. The advantage of shampoo is its ease of application, can be applied to larger area of involvement (unlike topical antifungals) and requires shorter duration of treatment. The treatment regimen was tolerated in this study, except three patients complained of pruitus and irritation but not so much severe to stop the treatment. In this open trial the number of patients was less. Hence it would be interesting to explore further by comparing ketokonazole 2% shampoo with other treatment modalities in the treatment of PV, taking more number of patients. Further large controlled trials are required to establish its efficacy in pityriasis versicolor.

CONCLUSION:
The shampoo was applied daily for 15 days and found to be very effective in clearing the Pityriasis Versicolor. There were no side effects. Ketoconazole 2% shampoo was shown to be highly effective and well tolerated for the treatment of PV, with significant reduction in scaling and elimination of the causative agent.

REFERENCES

1. Hay RJ, Moore M. Mycology. In: Champion RH, Burton JL, Burns DA, Breothnach SM eds. Textbook of Dermatology. 6th ed. Blackwell Scientific Publications, Oxford, 1998: 1286 – 1289
2. Borelli D, Jacobs PH, Nall L. Tinea versicolor: epidemiologic, clinical, and therapeutic aspects. J Am Acad Dermatol 1991; 25: 300-305.
3. David SL, Henry MR, et al. Ketoconazole 2% shampoo in the treatment of Tinea versicolor: A Multicentre Randomized Double blind, placebo controlled trial. J Am Acad Dermatol 1998 ; 39: 944-950
4. Sadeque JBMZ, Shohidullah M, Shah OR, et al. Systemic Ketoconazole in the treatment of tinea versicolor. Int J Dermatol 1995; 34:504-505.
5. Nagpal VB, Jain VK, Aggarwal K, Comparative study of oral and topical ketoconazole therapy in pityriasis versicolor. Indian J Dermatol, Venerol, Leprol 2003 Jul-Aug 69(4):287-288
6. Rekocewicz I, Guillaume JC, Benkhraba F, et al. Double-blind, placebo controlled study of 2% ketoconazole as a single application in the treatment of tinea versicolor. Ann Dermatol Venerol 1990; 117: 709-711
7. Lange DS, Richards HM, Guarnieri J, et al. Ketoconazole 2% shampoo in the treatment of tines versicolor: A multicentre randomized, double blind, placebo controlled trial. J Am Acad Dermatol 1998; 39: 944-950.