

## TREATMENT OF 22 CASES OF SELECTED NON-PSORIATIC DERMATOSES WITH ORAL AROMATIC RETINOID (TIGASON)

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Twenty two cases of different selected dermatoses other than psoriasis, were treated with oral aromatic retinoid (Tigason). We observed complete or nearly complete remission in 9, moderate improvement in another 9 and slight improvement in 3 patients, while one patient did not show any response. Side effects were noticed in 14 patients.

**Key words :** Selected non-psoriatic dermatoses, Retinoid.

Beneficial effect of vitamin A in different dermatoses with abnormal keratinization is known since long, but its use was limited because of side effects. Later, more effective and less toxic synthetic derivatives, like retinoic acid, 13-cis-retinoic acid and aromatic retinoid became available for the treatment of these conditions. Aromatic retinoid (Tigason) is more effective than other derivatives in certain diseases with abnormal keratinization, like psoriasis,<sup>1-3</sup> pityriasis rubra pilaris,<sup>4-6</sup> Darier's disease,<sup>7</sup> ichthyoses,<sup>8</sup> palmo-plantar keratodermas<sup>9</sup> and generalized lichen planus.<sup>10</sup> Some preventive and curative effect has also been noticed in different precancerous and cancerous conditions.<sup>1,11</sup> In this study, therapeutic effect and efficacy of Tigason in a selected group of non-psoriatic dermatoses are recorded and discussed.

### Materials and Methods

Twenty two patients (12 males and 10 females) of different dermatoses other than psoriasis were selected for this study from January, 1983 to July, 1985. Majority of the patients were admitted to the dermatology ward for initial assessment. Routine and other necessary laboratory investigations were performed before, during and after the treatment. Grading of the dermatoses was based on the extent of involvement and other characters of the lesions.

The usual initial dose of Tigason was 0.75 mg/kg/day, which was reduced to 0.5mg/kg/day after considerable improvement was obtained, and later the patients were kept on 0.25mg/kg/day as maintenance dose for 3 to 6 months. In one case of pityriasis rubra pilaris, the dose was increased upto 2 mg/kg/day for 8 weeks. The duration of the treatment varied from 4 weeks to 1½ years.

### Results

Complete or nearly complete remission was observed in 9 patients, moderate improvement was noticed in another 9 patients, and slight improvement could be observed in 3 patients, while one patient did not show any response (Table I).

*Keratoderma palmo-plantaris* : Initial improvement was noticed in 2 weeks in all the eight cases. Complete clearance was observed in one patient after 12 weeks and in another within 16 weeks. Moderate improvement was seen in 6 patients within 3 to 4 months. Out of the patients who showed complete clearance, one had recurrence, 3 months after stopping the treatment. She was again given Tigason in full doses and showed marked improvement within 4 weeks. One patient who cleared initially was lost to follow up.

*Congenital ichthyosis* : Out of two patients with moderate ichthyosis, one showed almost complete clearance within 6 weeks therapy and the other after 12 weeks. The first patient did not come for follow up but the second continued

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Table I. Response to Tigason treatment.

Dermatoses	Total number of patients	Number of patients having				Side effects		
		Complete or nearly complete remission	Moderate improvement	Slight improvement	No effect	Severe	Mild to moderate rate	None
1. Keratoderma palmo-plantar	8	2	6	—	—	—	6	2
2. Congenital ichthyosis	5	2	2	1	—	1	2	2
3. Lichen planus	5	3	1	1	—	—	4	1
4. Pityriasis rubra pilaris	2	2	—	—	—	1	1	—
5. Xeroderma pigmentosa with SCE	2	—	—	1	1	—	1	1
Total	22	9	9	3	1	2	14	6

Tigason 0.25 mg/kg/day as maintenance therapy and remained free of scales. After 6 months the treatment was stopped and she showed recurrence with moderate scales after 3 months. Out of 3 patients with severe congenital ichthyosis, 2 showed moderate improvement and the third showed slight improvement within 4 to 24 weeks.

*Lichen planus* : Three patients with generalized lichen planus showed complete clearance within 6 weeks. One patient showed moderate improvement after 3 weeks, then she stopped the treatment because of appearance of bullous lesions. The fifth patient with hypertrophic lesions showed slight improvement after 4 weeks therapy. This patient did not come for follow-up after that.

*Pityriasis rubra pilaris* : One patient with moderate lesions showed complete clearance within 2 months. The other patient with erythroderma also showed almost complete clearance but we had to give him high dose of Tigason upto 2 mg/kg/day for 8 weeks. Later, the dose was gradually reduced and he is free of lesions on a maintenance dose of 0.5 mg/kg/day for the last 18 months.

*Xeroderma pigmentosa with squamous cell epitheliomas* : One patient showed slight improve-

ment regarding the pre-malignant lesions over the face within 8 weeks of treatment. The other patient did not show any change. In the first patient Tigason was continued in a dose of 0.5 mg/kg/day for 6 months without further change in the lesions. On the contrary she developed a new lesion of squamous cell epithelioma in the eye, while on Tigason therapy.

#### Side effects

The usual mild to moderate side effects were observed in 14 patients, while 6 patients did not show any side effect. One patient of congenital ichthyosis developed severe abdominal pain and the therapy had to be stopped. One patient of pityriasis rubra, pilaris who was on high dose, developed epistaxis, which did not recur after reducing the dose. There was no significant change in the laboratory parameters in any of the patients studied.

#### Comments

The response to Tigason therapy in the present study was almost constant with the results in the previous studies.<sup>1,5-8-10</sup> Similar to previous studies,<sup>1,9</sup> we also noticed tenderness in the palms and soles after rapid improvement of our first two cases of tylosis but we could minimize this adverse effect by reducing the dose of Tigason earlier. The patients needed main-

tenance dose of 0.25 mg/kg/day to sustain the improvement. In one case of congenital ichthyosis, the initial response was excellent with complete clearance of the scales but the effect was not the same later, even on giving the same dose again. Hypertrophic lesions of lichen planus showed only minimal improvement. A severe case of pityriasis rubra pilaris with crythroderma showed almost complete remission and is free of lesions on maintenance therapy. One of our patients of xeroderma pigmentosa with squamous cell epitheliomas on the cheeks, developed similar growth in one of the eyes while on therapy for the last 6 months. In a previous study,<sup>1</sup> no new malignant lesion was noticed during three months course of therapy.

The side effects were minimal and we did not notice any significant change in the laboratory parameters like, liver functions, total lipids, triglycerides and serum cholesterol levels, as in our previous study with cases of psoriasis.<sup>3</sup> One patient of generalized lichen planus developed a few bullous lesions after 3 weeks therapy, which disappeared on discontinuing Tigason. Such a side effect has not been reported earlier in the literature.

As shown in other studies, this work confirms that systemic aromatic retinoid has proved to be of great help in improving tylosis, congenital ichthyosis, generalized lichen planus and pityriasis rubra pilaris. Our study on two cases of xeroderma pigmentosa, casts doubt on the use of Tigason in this condition.

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