# ORIGINAL CONTRIBUTIONS

# TREATMENT OF DARIER'S DISEASE WITH ORAL AROMATIC RETINOID (TIGASON)

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The new oral aromatic retinoid (Tigason) was tried for the treatment of three Libyan patients with Darier's disease. The clinical response was good but in two patients, side effects necessitated stopping the treatment.

Key words: Darier's disease, Retinoid.

Darier's disease (keratosis follicularis) is a rare disorder of keratinization transmitted as an autosomal dominant trait.

Until now, no satisfactory treatment is known. Vitamin A in high doses for 2 months or so gives variable results<sup>1,2,3</sup>. Treatment with a combination of vitamins A and E has also been tried with temporary improvement in the condition<sup>2</sup>. Slight to moderate improvement was noticed after topical tretinoin therapy<sup>45</sup>. 13-cis-retinoic acid has also been tried with moderate improvement<sup>6,7</sup>. Recently, oral aromatic retinoid, R0 10-9359 (Tigason) has been used successfully<sup>6</sup>.

Here we present 3 cases of Darier's disease who were treated with the new oral aromatic retinoid R0 10-9359 (Tigason). All the patients were hospitalized initially for this purpose.

#### Case Reports

#### Case 1

A 70-year-old Libyan male patient had typical lesions of Darier's disease predominantly over his face, chest and interscapular area. In addition, he had lesions over the groins, pubic region and dorsum of hands and feet. There

was also moderate, diffuse hyperkeratosis of the palms and soles with multiple pin-point pits. He had been treated earlier with local applications of 1% retinoic acid on the hands and feet for two weeks with slight improvement. He was admitted in February, 1982. investigations including complete blood analysis. ESR, bilirubin, S GPT, alkaline phosphatase, total lipids, triglycerides, cholesterol, serum proteins, electrolytes, urea and sugar were found to be within normal limits. Systemic therapy with the aromatic retinoid (Tigason) 35 mg daily, was started after controlling the secondary bacterial infection. After one week, the patient showed slight improvement. After 3 weeks of therapy we observed marked improvement except on the lesions of hands and feet. We had to stop further treatment because he developed a corneal ulcer in the right eve. where he had an old corneal leucoma. He had also developed mild cheilitis. During and at the end of the treatment, there was no significant alteration in the laboratory parameters. Recurrence of the lesions was observed after 2 months of stopping the treatment.

### Case 2

A 53-year-old male Libyan patient had extensive lesions of Darier's disease for the last 30 years, with marked hyperkeratosis of

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the soles and palms with pitting. The patient was given oral Tigason 35 mg daily. one week we observed a slight decrease in the size of the papular lesions and the scales. There was no change in the hyperkeratosis of the palms and soles. After 3 weeks, the size of the lesions decreased markedly, the scales disappeared completely and there was a moderate decrease in the hyperkeratosis of the palms and soles. By the fourth week, the papular lesions disappeared almost completely. By this time the patient developed severe cheilitis and dryness of the mouth and nose, so we had to stop the treatment. All the laboratory parameters were within normal levels, before, during and after the treatment. The patient was followed-up for one year. Till 2 months there was no recurrence but later, the lesions started reappearing gradually and by 6 months he developed similar lesions as before the treatment.

#### Case 3

A 22-year-old male Libyan patient, who had been suffering from Darier's disease since the age of 12 years, was given 25 mg of Tigason daily. After one week we noticed a slight improvement in the bigger lesions. After 4 weeks we observed complete disappearance of the lesions from the forehead, chest, back, pubic region and sacral region. There was a slight reduction in the size of the hyperkeratotic papular lesions over the dorsum of hands and feet. The laboratory parameters were within normal limits before, during and after the treatment. There was no recurrence after 4 months of stopping the treatment.

#### **Comments**

Tigason has been made available for the treatment of Darier's disease only recently. Good to very good results have been obtained by many investigators<sup>8</sup>-10. The dose of Tigason in our cases was 0.75 mg/kg of body weight. In their analysis of 4 cases, who got similar initial dose of Tigason, Constantin et al<sup>6</sup> did not observe any serious side effects even

after 5 years of maintenance treatment. Out of the three cases which we treated, one had very good response to treatment except for the lesions over the dorsum of his hands and feet. He is still on our follow-up and so far, there is no recurrence, four months after stopping the therapy. In two of our cases the response was good but the therapy had to be discontinued because of severe side effects. One of these cases developed corneal ulceration and the other severe cheilitis and dryness of the mouth and nose.

In our opinion, Tigason is a useful new introduction for the systemic treatment of Darier's disease but its use may be limited because of the alarming side effects in some cases

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