

atosis verruciformis. Both these conditions have been described in members of the same family in some cases but many authors consider the 2 diseases as separate entities (1, 5–6). In our case, the pathological and ultrastructural features were characteristic of Darier's disease.

The therapeutic approach for Darier's disease includes topical keratolytics and retinoids, as well as oral retinoids (5). Systemic side effects limit the use of oral retinoids, while topical isotretinoin commonly causes erythema, burning sensation and irritation; furthermore, the response rate for Darier's disease to topical isotretinoin is below 50% (7, 8). Recently, a new generation of topical retinoids has been introduced with success. Sporadic reports indicates adapalene and tazarotene as useful tools in this genodermatosis (9–11). Often tazarotene requires concomitant use of topical steroids in order to prevent irritation (10). In our case, adapalene alone, once a day for 6 weeks, showed good efficacy and, as expected from the existing literature, good tolerability (12). The synthetic retinoid adapalene acts as a modulator of keratinization and cellular differentiation, in addition to having a strong anti-inflammatory activity (13–14). Its activity is mediated through the selective binding to the RAR nuclear receptor. The lack of irritation, and other side-effects, and the clinical efficacy of adapalene gel 0.1% makes it an ideal treatment of localized Darier's disease, but further studies on a larger population of patients are necessary before its full therapeutic benefit can be appreciated.

REFERENCES

1. Blanchet-Bardon C, Durand-Delorme M, Nazzaro V, Bedane C, Mariano A, Mimos C, Puissant A. Acrokeratose verruciforme de Hopf ou maladie de Darier acrale. *Ann Dermatol Venereol* 1988; 115: 1229–1232.
2. Won Hur, Won Soo Lee, Sung Ku Ahn. Acral Darier's disease:

- report of a case complicated by Kaposi's varicelliform eruption. *J Am Acad Dermatol* 1994; 30: 860–862.
3. Regazzoni R, Zambruno G, De Filippi C, Rosso R, Donadini A. Isolated acral Darier's disease with haemorrhagic lesions in a kindred. *Br J Dermatol* 1996; 135: 489–504.
 4. Romano C, Massai L, Alessandrini C, Miracco C, Fimiani M. A case of acral Darier's disease. *Dermatology* 1999; 199: 365–368.
 5. Burge SM, Wilkinson JD. Darier-White disease: a review of the clinical features in 163 patients. *J Am Acad Dermatol* 1992; 27: 40–50.
 6. Hafner O, Vakilzadeh F. Acrokeratosis-verruciformis-anliche Veränderungen beim morbus Darier. *Hautarzt* 1997; 48: 572–576.
 7. O'Malley MP, Haake A, Goldsmith L, Berg D. Localized Darier disease: implications for genetic studies. *Arch Dermatol* 1997; 133: 1134–1138.
 8. Burge SM, Buxton PK. Topical isotretinoin in Darier's disease. *Br J Dermatol* 1995; 133: 924–928.
 9. Micali G, Nasca MR. Tazarotene gel in childhood Darier disease. *Pediatr Dermatol* 1999; 16: 243–244.
 10. Burkhart CG, Burkhart CN. Tazarotene gel for Darier's disease. *J Am Acad Dermatol* 1998; 38: 1001–1002.
 11. English JC, Browne J, Halbach DP. Effective treatment of localized Darier's disease with adapalene 0.1% gel. *Cutis* 1999; 63: 227–230.
 12. Clucas A, Verschoore M, Sorba V, Poncet M, Baker M, Czernielewski J. Adapalene 0.1% gel is better tolerated than isotretinoin 0.025% gel in acne patients. *J Am Acad Dermatol* 1997; 36: S116–118.
 13. Shroot B, Michel S. Pharmacology and chemistry of adapalene. *J Am Acad Dermatol* 1997; 36: S96–103.
 14. Michel S, Jomard A, Démarchez M. Pharmacology of adapalene. *Br J Dermatol* 1998; 139 Suppl 52: 3–7.

Accepted January 2, 2001.

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