Confluent and Reticulated Papillomatosis: Response to Topical Calcipotriol

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Confluent and reticulated papillomatosis (CRP) is a relatively rare disease manifested by grayish-brown verrucous papules localized to the intermammary and interscapular regions [1]. The papules coalesce into plaques and those at the periphery spread out and form a pigmented reticulated pattern. The cause of the disease has not been clarified, however, 'a genetically determined defect of keratinization' could be an explanation [2].

Calcipotriol has been found effective in diseases of keratinization [3]. This prompted us to employ calcipotriol in a patient with CRP.

A 25-year-old white female patient was referred for a 1-year history of slightly itchy skin lesions on the trunk. Family history was

negative for similar lesions. Dermatologic examination disclosed 3- to 4-mm-sized flat-topped, red-brown keratotic papules that formed plaques in a reticulated manner in the intermammary region, abdomen and interscapular area. The mucous membranes and other skin areas were free of lesions. Histo-pathologic examination of a 5-mm punch biopsy specimen disclosed epidermal hyper-keratosis, a decrease in granular layer and thinning of the rete ridges which were consistent with a diagnosis of CRP. Laboratory investigations revealed normal findings. A potassium hydroxide preparation was negative for *Pityrosporum orbiculare*.

The patient was started on calcipotriol ointment (50 µg/g) with twice-daily application and at doses of 100 g/week. Baseline serum adjusted calcium was 2.28 mmol/l (normal range 2.25-2.55 mmol/l). Regular calcium measurements were repeated on days 15 and 30 of the treatment and were found 2.40 and 2.54 mmol/l, respectively. The lesions subsided and showed considerable improvement within 4 weeks. The patient did not show any flare-ups, and was lesion free 1 month after the treatment. Serum-adjusted calcium level assessed 2 weeks after discontinuation of calcipotriol ointment was 2.50 mmol/l.

CRP was first described by Gougerot and Carteaud [1] in 1927. Females and obese blacks are more prone to the disease. The etiology is unknown; however, an association

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with *Pityrosporum* infection [1, 2], thyroid disease [1], Cushing's syndrome [1], acanthosis nigricans, impaired glucose tolerance or hyperinsulinemia [2] has been suggested. Also, there is evidence that CRP could be due to 'a genetically determined keratinization defect' [2].

Treatment includes retinoids, selenium sulfide, ketoconazole, erythromycin and tetracycline [1,2].

The vitamin D3 analogue calcipotriol has been shown to be a potent regulator of cell differentiation and an inhibitor of cell proliferation in human keratinocytes [4-8]. Calcipotriol has also been found effective in reducing markers of abnormal keratinization (expression of keratin 16) [6,7]. At present, calcipotriol ointment is only licensed for use in chronic plaque psoriasis. However, it could be of benefit in certain conditions like pityriasis rubrapilaris [9]. Our observation supports the view that CRP could be regarded as a disease of keratinization and that calcipotriol ointment could be of use in the management of the disease. The major concern about calcipotriol is its effect on calcium metabolism. At doses of 100 g/week, calcipotriol is generally considered to be safe with respect to any changes in calcium levels [5, 8]. However, hypercalcaemia was reported in a case of extensive psoriasis treated with less than 100 g calcipotriol/ week [10]. In our case, serum-adjusted calcium level was slightly increased, but remained in the normal range.

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- Nail Pigmentation due to Roxithromycin

Key Words

Nail pigmentation · Roxithromycin

Roxithromycin, the first of a new generation of macrolides, has an antibacterial spectrum similar to that of erythromycin for typical and atypical acute community-acquired infections. However, it has improved pharmacokinetics with proven efficacy, and better tolerance and compliance. The drug has been frequently used in infections of the upper and lower respiratory tract, ear, teeth,

skin and soft tissue and genitourinary system [1–5]. The major adverse effects include nausea, abdominal pain and diarrhea. These are however, reduced in intensity and frequency as compared to other macrolides. Other side effects which may occasionally be seen are dyspepsia, flatulence, constipation, dizziness, pruritus, urticaria and skin rashes [4, 5]. We report a patient who developed nail pigmentation following roxithromycin. A 23-year-old male presented with pigmentation of finger nails of 2 months duration. The patient revealed that he had an episode of upper respiratory tract infection (URTI) 3 months before, for which roxithromycin, tablet 150 mg twice daily, was prescribed. He initially responded but as symptoms persisted, he continued the drug for another 2 weeks. On stopping the drug, he noticed a slight brownish discoloration of both thumb nails. He had a further episode of URTI for which he again took roxithromycin for 2 weeks. At that time, he noticed further darkening of pigmentation over both thumb

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