

Calcipotriol-betamethasone dipropionate combination: a new unique topical therapy for psoriasis

Reported by YH Chan 陳耀海

Date: 14 November, 2003
Venue: Holiday Inn, Hong Kong
Speaker: Prof. Harvey Lui
Professor and Head, Division of Dermatology, Department of Medicine, University of British Columbia, Canada
Organiser: The Hong Kong Society of Dermatology and Venereology

Psoriasis therapy is based on a combination approach involving patient education and support, topical therapy, phototherapy and systemic therapy. Topical therapy for psoriasis can be further divided into five major groups namely topical steroid, vitamin D analogue, vitamin A analogue, coal tar and anthralin. The use of combination topical therapy with more than one agent can increase the efficacy and reduce the toxicity of a particular agent such as steroid. However, it may lead to a decrease in compliance due to the increased complexity of regimen. In daily practice, calcipotriol is often combined with a topical steroid to minimise irritation and speed up improvement. Calcipotriol can normalise keratinocyte proliferation and differentiation whilst steroid has anti-inflammatory and immunomodulatory effect. However, these two agents are incompatible with each other when simply mixed together.

Nowadays, calcipotriol and betamethasone dipropionate have been successfully mixed

together with a penetration enhancer known as arlamol E. In an international multicentre double blind randomised controlled trial involving 1028 psoriasis patients, such calcipotriol-betamethasone dipropionate combination was found to produce more marked and more rapid reduction in Psoriasis Area and Severity Index than steroid or calcipotriol monotherapy after four weeks of therapy. Calcipotriol-betamethasone dipropionate combination caused less skin-related adverse effects than topical steroid monotherapy and the addition of steroid to calcipotriol could decrease its irritation. In another study comparing the efficacy of once daily and twice daily application of this calcipotriol-betamethasone dipropionate combination in 389 patients, it was found that there was no statistically significant difference in the overall efficacy. In view of the more rapid effect and greater efficacy of calcipotriol-betamethasone combination, the speaker suggested the use of this topical formula in the induction phase of psoriasis therapy followed by alternate therapy with calcipotriol-betamethasone combination and calcipotriol or calcipotriol monotherapy during the stabilisation and maintenance phase of management.

Learning points:

Calcipotriol-betamethasone dipropionate combination gives a faster response and greater efficacy than calcipotriol or betamethasone dipropionate alone in the treatment of psoriasis. In addition, its simple once daily regimen can result in better patients' compliance.