

## Reports on Scientific Meetings

### Current combination approaches to psoriasis therapy

Reported by KHN Chan 陳厚毅

Date: 23 March 2007  
Venue: Sheraton Hotel, Hong Kong  
Speaker: Professor Harvey Lui  
Professor and Chairman,  
Department of Dermatology and Skin  
Science, Vancouver General Hospital,  
University of British Columbia, Canada  
Organiser: Hong Kong Society of Dermatology  
and Venereology

Psoriasis therapy is based on a combination approach. The three "pillars" of treatment include (i) topical treatment, (ii) phototherapy (UVB, PUVA) and excimer laser and (iii) systemic treatment (methotrexate, acitretin, cyclosporine and biologics). By using combination therapy, the efficacy can be enhanced and the toxicity can be reduced.

There are five primary topical agents for psoriasis (corticosteroids, vitamin D derivatives, vitamin A derivatives, tar and anthralin). Anthralin and salicylic acid must be used together as anthralin requires a low pH to maintain chemical stability. Coal tar consists of an active ingredient – carbazole which is anti-angiogenic and anti-inflammatory. Further, it inhibits IL-15 production and reduces nitric oxide synthase. The use of UVB and tar or PUVA is also effective for psoriasis. Since PUVA induces photo damage and is carcinogenic, exposure to PUVA treatment should be limited to 200-250 total sessions. Moreover, PUVA and cyclosporine are not recommended to be used together as it has been shown that the risk of skin cancer with cyclosporine following PUVA will be

increased by 6.9 times and the incidence rate of skin cancer is 1 tumour/patient/year.

Calcipotriol has anti-proliferative effect and normalises cellular differentiation while corticosteroid has anti-inflammatory and immunomodulatory effects. Calcipotriol is often used together with topical corticosteroid to minimise irritation and to enhance treatment efficacy. However, they are incompatible when mixed because calcipotriol dissolves in ointment and corticosteroid suspends in ointment. Daivobet™ is a single product which is a combination of calcipotriol, betamethasone dipropionate in a unique vehicle. The topical application of either Daivobet™ once daily or Daivobet™ twice daily have rapid onset of action and they do not differ in their overall efficacy. PASI 75 can be achieved in 50.3% of patients. Regarding the skin related adverse event, it is well tolerated and causes less irritation than Daivonex™ BD. The addition of steroid to calcipotriol decreases skin reactions. It can be safely used as maintenance treatment of psoriasis for one year.

#### **Learning points:**

Combination approach is useful in the treatment of psoriasis. The combination of calcipotriol and corticosteroid improves treatment efficacy and reduces side effects. Daivobet™ is a single product which is a combination of calcipotriol, betamethasone dipropionate in a unique vehicle. It is well tolerated and can be safely used as a long term maintenance treatment for one year.