The updated treatment protocol of acne with the total cosmetic care

Reported by KHN Chan 陳厚毅

Date: 15 December 2006
Venue: Hong Kong Newton Hotel
Speaker: Professor Larry E. Millikan
Department of Dermatology
Tulane University School of Medicine
New Orleans, Louisiana, USA
Organisers: The Hong Kong Society of Dermatology and Venereology; The Hong Kong Medical Association

Different anti-acne agents use different mechanisms to treat acne. Topical therapies are mainly used for mild acne while systemic therapies are used for more severe types of acne. Topical retinoid increases basal cell mitosis and epithelial turnover, disrupts comedones and appears to normalise the maturation of the follicular epithelium and thus reduce inflammation. Benzoyl peroxide reduces micro-organisms with the advantage of no drug resistance. Topical and oral antibiotics reduce bacterial proliferation and the inflammatory processes. However, there is a problem of increasing antibiotic resistance. Oral retinoid is mainly used for severe types of acne. It reduces sebum secretion and inhibits the growth of microorganisms. It also reduces inflammation and decreases the plugging of the lining of the duct.

Scar prevention is of vital importance in acne management. Moreover, doctors need to bear in mind the psychological and emotional aspect of acne. The psychological impact of acne is even greater than that of cancer and psoriasis for some patients.

According to meta-analysis, 0.1% adapalene is a good anti-acne medication with good tolerability. It is less irritating than 0.025% tretinoin gel. After its application, there is no significant dryness, erythema or scaling. Moreover, it has high stability after exposure to light. Both adapalene and tretinoin are under pregnancy category C.

Topical retinoid plus oral antibiotics give a better result than oral antibiotics alone because they target on different mechanisms. We can start topical retinoid and an oral antibiotic when there are inflammatory lesions. Then discontinue the antibiotic when the inflammatory lesions subside, and use the topical retinoid as the maintenance therapy.

Learning points:
Adapalene is a topical retinoid which is good for both mild and moderate acne. It treats both inflammatory and non-inflammatory lesions. It is less irritating than other retinoids and produces no significant dryness, erythema or scaling after its application.