

Joint Annual Scientific Meeting 2018

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that normalise abnormal keratinisation with pilosebaceous unit (e.g. Talarozole), modulators of *C. acnes* (e.g. Vitamin C), agents that modulate inflammatory response (e.g. Dapsone 5% gel) and immunotherapy (e.g. killed pathogen-based vaccines).

Acne - updates and treatments

Speaker: Mandy Chan

Division of Dermatology, Department of Medicine, The University of Hong Kong, Hong Kong

Recent findings suggest inflammatory acne is not due to an increase in bacterial load caused by proliferation of *Cutibacterium acnes* (*C. acnes*), previously known as *Propionibacterium acnes*. Instead there is a loss of skin microbial equilibrium (dysbiosis) which might lead to the selection of more pathogenic subset of *C. acnes* strain.

The emergence of antibiotic resistance in *C. acnes* due to widespread antibiotic use has become a challenge in the management of acne. Novel treatment with skin biofilms may overcome the problem of increased resistance and restore a balanced cutaneous microbiome (e.g. Mytacine). Other novel treatments of acne under investigation include agents targeting sebum production (e.g. Cortexolone), agents

Learning points:

The emergence of antibiotics resistance in *C. acnes* has become a challenge in acne management. Understanding the relationship between skin biofilms and acne formation may prime new concepts for future acne treatment.

Updates in the treatment of rosacea

Speaker: Hazel Oon

National Skin Centre, Singapore

Rosacea may be confused with other facial dermatoses such as eczema, acne vulgaris, allergic/irritant contact dermatitis or lupus erythematosus. Evidence-based studies suggest food allergies, urogenital disease and hyperlipidaemia are common comorbidities, probably due to common distinct genetic and environmental risk factor profiles with rosacea.

Rosacea can be divided into erythematotelangiectatic, papulopustular, phymatous, and ocular rosacea subtypes or may occur as a combination of the above. Treatment should be based on the presenting features and may include combination treatments. Ivermectin 1% cream provides both anti-inflammatory and antiparasitic activity and it has been shown that it produced a more effective and rapid response than metronidazole 0.75% cream. Dual brimonidine 0.33% gel and ivermectin 1% cream showed greater efficacy in treatment of rosacea compared to ivermectin alone and without increasing adverse effects. However, physicians should be aware of the adverse effects of brimonidine gel. These include allergic contact dermatitis, paradoxical erythema appearing within 3-6 hours after application, return to baseline erythema or even exaggerated recurrence of erythema that occurs as therapy wears off 10-12 hours after application. For recalcitrant granulomatous rosacea, isotretinoin treatment may be effective.

Learning points:

Treatment of rosacea should be based on the presenting features and may include combination treatments. Physicians should be aware of the common comorbidities associated with rosacea and screen accordingly if indicated.

Recent advances in energy-based device in cosmetic dermatology

Speaker: Henry Chan

Hong Kong Dermatology and Laser Centre, Hong Kong

The use of novel energy-based devices was discussed. These devices utilise the extended theory of selective photothermolysis which involves controlled photothermal injury to structures surrounding the target. Emerging applications include hair removal, skin rejuvenation via fractional photothermolysis and micro-excision to enhance skin tightening. Differential tissue injury response by post-cryotherapy cooling has led to the development of cryolipolysis and cryomelanolysis.

After adjustment of dosimetry and cooling parameters, these devices can be used for other therapeutic indications such as non-invasive fat reduction (thus replacing traditional surgical liposuction) and reduction of post-inflammatory hyperpigmentation after laser treatment or cryotherapy. Acne vulgaris can also be treated by this method via its selective destruction of sebaceous glands within the hair follicle.

Learning points:

Novel techniques derived from the extended theory of selective photothermolysis will soon be put into clinical practice. Further efficacy studies and safety data are awaited.