

## Reports on Scientific Meetings

### The Hong Kong Society of Dermatology and Venereology Annual Scientific Meeting 2016

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Date: 25-26 June 2016  
Venue: Sheraton Hong Kong Hotel & Towers, Tsimshatsui, Kowloon, Hong Kong  
Organisers: The Hong Kong Society of Dermatology and Venereology and The Hong Kong College of Dermatologists

features: multiple blue-gray globules, large blue-gray ovoid nest, leaf-like areas (rare), spoke-wheel area (rare), shiny white area, arborising vessels (branching vessels, large in diameter, vessel in focus), ulceration, and absent of pigmented network. In Japanese patients, 90% of BCC are pigmented and are rough physically and typically ulcerate.

#### **Dermoscopy of BCC and seborrhoeic keratosis**

Speaker: Hiroshi Koga  
Department of Dermatology, Shinshu University School of Medicine, Japan

Melanocytic and non-melanocytic lesions may be distinguished by the following algorithm: (1) Pattern structure to look for melanocytic skin lesions and differentiate naevus from melanoma. (2) Look for features of basal cell carcinoma (BCC). (3) Look for features of seborrhoeic keratosis (e.g. evenly pigmented in non-facial areas, pseudonetwork on the face, moth-eaten border, jelly sign, fingerprint-like structures, brain-like structures, milia-like cyst, comedo-like opening, hairpin vessel with white halo). (4) Look for angioma, angiokeratoma. (5) Examine vascular structures in non-melanocytic lesions (e.g. keratinising tumour, squamous cell carcinoma, sebaceous gland hyperplasia, clear cell acanthoma) (6) Look for structureless areas. Cutaneous BCC has at least one of the following

#### **Learning points:**

Most BCC in Japanese are pigmented. Dermoscopy is essential for diagnosing small BCCs.

#### **Patient preferences for partner notification of sexually transmitted infections in Hong Kong**

Speaker: Bessie Tong  
Social Hygiene Service, Centre for Health Protection, Department of Health, Hong Kong

Partner notification (PN) plays an important role in strategies for prevention and control of sexually transmitted infections (STIs). A cross-sectional study was conducted from May to July 2014 in four Social Hygiene Clinics of the Department of Health in Hong Kong. The objectives of this study are to identify patient preferences on PN methods and means of

communication, patient barriers for PN and to investigate acceptability of novel electronic methods of PN for STIs. A total of 533 patients newly diagnosed with STIs were recruited in which 259 (48.6%) were females and 274 (51.4%) were males. They completed a self-administered structured questionnaire. Contact referral notes were accepted by 154 patients (28.9%), whereas 379 patients (71.1%) refused PN. Female patients, patients with urogenital symptoms and those with inconsistent use of condom were most likely to accept partner referral. Over half of the patients agreed that STI-related stigma and partner being asymptomatic accounted for the perceived barriers of PN. The most favoured method of PN was patient referral (77.5%) as currently adopted by the Social Hygiene Service. The most preferred means of communication for patient referral of PN was to inform sexual partner face-to-face (69.8%).

### **Learning points:**

STI clinics may enhance partner notification with client-oriented counselling, which should help patient overcome perceived barriers.

## **Application of medical genetics in paediatric dermatology**

Speaker: Brian Chung

Department of Paediatrics and Adolescent Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong

It is estimated that about 85% of disease-causing mutations occur in the exon which only constitutes to around 1% of the whole human genome. Whole exome sequencing is very useful in finding the aetiology of previously undiagnosed paediatric diseases which could result in various skin manifestations. Some of the rare monogenic dermatological syndromes can be diagnosed earlier by using this genetic technique. For

instance, mutation in the GJB2 gene is very likely the cause of KID (keratitis, ichthyosis, deafness) syndrome which can be found by exome sequencing. On the other hand, this technique also helps to understand disease mechanism of some common dermatological diseases, such as atopic eczema which is closely linked to the mutation of the filaggrin gene found by exome sequencing. In the research setting, exome sequencing has been useful for discovering new genes leading to molecular diagnosis such as finding of mutations in TWIST2 gene of Barber-Say syndrome.

### **Learning points:**

Exome sequencing is a very useful medical genetic tool for managing paediatric patients with dermatological diseases.

## **Dermoscopy on non-pigmented skin lesions**

Speaker: Peter Soyer

Dermatology Research Centre, The University of Queensland, School of Medicine, Australia

Dermoscopy can be used in non-pigmented skin tumours due to the enhanced recognition of vascular structures not visible to the naked eye. Amelanotic melanoma and basal cell carcinoma often lead to delayed clinical diagnosis because as their clinical appearance can mimic other benign amelanotic or hypopigmented skin conditions. Amelanotic or hypomelanotic melanomas have the following dermoscopic findings, namely, atypical vessels, dotted vessels, and a central pink to white veil. The classic features of basal cell carcinoma include arborising telangiectasia, blue/grey ovoid nests, ulceration, multiple blue/grey globules. Leaf-like areas and spoke-wheel areas are significantly increased in pigmented basal cell carcinomas compared with non-pigmented basal cell carcinomas. Dermoscopy can also be used to evaluate vascular lesions, e.g. cherry angioma, pyogenic

granuloma, angiokeratoma and Kaposi sarcoma. Among a broad spectrum of different types of vascular patterns, six main morphologies can be identified. These are comma-like, dotted, linear-irregular, hairpin, glomerular, and arborising vessels.

Dermoscopy can be used in the evaluation of psoriasis, lichen planus and scabies, e.g. dermoscopic finding of uniform distribution of red dots on a light pink homogeneous background in psoriasis.

### **Learning points:**

Dermoscopy can be used in non-pigmented skin tumours due to the enhanced recognition of vascular structures not visible to the naked eye. Dermoscopy can also be used to evaluate vascular lesions.

## **How to handle anxious parents with steroid phobia**

Speaker: Sébastien Barbarot

Department of Dermatology, University Hospital of Nantes, France

Poor drug compliance due to topical corticosteroid (TCS) phobia is an important factor contributing to treatment failure in atopic dermatitis (AD). In a recent study in France, eight out of 10 AD patients reported fear about the use of TCS which was not associated with either the characteristics of AD (duration, impact and severity) or the patient (age and sex). In order to overcome this problem, exploration of TCS phobia should always be done as it is often not acknowledged spontaneously by patients. The patient should then explain his beliefs and cause of fears. The issue of adverse effects must also be assessed. The advice to apply TCS "sparingly" or "thinly" should better be avoided. Therapeutic patient education is an important tool in the fight against TCS phobia. Caregivers should give clear and consistent explanations about the

disease and treatment including clear details of how much TCS to apply, where to apply, and duration of application. Finally, the quality of the patient-doctor relationship is critical for ensuring treatment adherence and reducing TCS phobia.

### **Learning points:**

In order to manage AD patients successfully, we should know how to handle the problem of TCS phobia among these patients and their parents.

## **Management of melanonychia**

Speaker: Hiroshi Koga

Department of Dermatology, Shinshu University School of Medicine, Japan

Melanonychia is a common nail symptom with many possible causes but one serious cause is subungual melanoma. Melanonychia may be caused by the activation or proliferation of nail matrix melanocytes. The causes of melanonychia due to melanocyte proliferation include nail matrix naevi, lentigo and melanoma. Other causes of melanonychia include drug-induced nail pigmentation, ethnic-type melanonychia and infection. Evaluation of melanonychia includes accurate clinical information, clinical images and dermoscopic images. Attention should be paid to history of medication used, any evidence of infectious disease and how many nails are affected. Enquiry for any change in colour, pattern and size of the band is also important. Clinical features that may suggest early nail melanoma and warrant a biopsy of the nail matrix include (1) melanonychia that develops during adulthood, involving a single digit, and enlarges rapidly. (2) longitudinal melanonychia greater than 3 mm in width with variegated pigmentation (3) pre-existing longitudinal melanonychia becomes darker or wider or demonstrates blurred lateral borders, (4) longitudinal melanonychia associated with nail plate fissuring, splitting, or dystrophy,

(5) melanonychia extending to the nail folds (Hutchinson's sign).

Melanonychia is often caused by melanocytic naevi in children. Subungual melanoma or melanoma in-situ is very rare in children. Bands of longitudinal melanonychia due to nail matrix nevi can vary in size and in colour.

Regarding clinical images, determining the presence of Hutchinson's sign is important. It is also important to differentiate whether the pattern is regular or irregular on dermoscopic images. If there are worrisome features, e.g. presence of Hutchinson's sign, irregular dermoscopic features, nail matrix melanoma must be excluded as the cause of melanonychia and nail matrix biopsy is warranted.

### **Learning points:**

Evaluation of melanonychia includes accurate clinical information, clinical images and dermoscopic images.

## **Rate and predictors of genital chlamydia trachomatis reinfection among men in Hong Kong**

Speaker: Wallace YK Lam

Social Hygiene Service, Department of Health, Hong Kong

Overseas studies revealed that 9.8%-10% of men attending sexually transmitted infection (STI) clinics had genital Chlamydia trachomatis (CT) re-infection within three to four months after treatment. The speaker presented his study which investigated the rate and predictors of genital CT reinfection among men attending STI clinics in Hong Kong. A cohort of men with genital CT infection attending Social Hygiene Clinics was enrolled from September 2013 to June 2014. Enrolled men had a follow-up visit three months after treatment and were retested

for CT infection by nucleic acid amplification test using a urethral swab.

There were 229 subjects recruited at the baseline visit and 192 (83.8%) subjects returned for follow-up re-testing. There were 22 cases of CT re-infection and the re-infection rate was 11.5%. Independent predictors of CT reinfection were i) subjects with history of STIs prior to recruitment, ii) presence of urethral discharge at follow-up visit and iii) greater number of sex partners following treatment. Since a substantial proportion of men had genital CT reinfection three months after treatment of the initial episode, a strategy of re-testing at three months is recommended for CT-infected men in Hong Kong.

### **Learning points:**

The results of this study suggest re-testing for men with CT infection three months later can potentially reduce the prevalence of CT infection.

## **Acne and inflammation: new aspects on pathogenesis and treatment**

Speaker: Christos Zouboulis

Department of Dermatology, Venereology, Allergology and Immunology, Dessau Medical Center, Germany

Recent data have supported a major role of inflammatory signalling in acne, namely newly recognised inflammatory mediators, neuropeptides and sebaceous lipids and new perspectives regarding the effects of *Propionibacterium acnes*. The interaction between dihydroeandrosterone (DHEA), seborrhoea, and inflammation causes acne.

Follicular inflammation is induced by DHEA. Stimulation of sebaceous lipogenesis is mediated by PPAR $\gamma$  while TNF- $\alpha$  further increases lipogenesis in human sebocytes. Inflammation is induced by adipokines

expressed in human sebocytes and is mediated by NF $\kappa$ B. NF $\kappa$ B also mediates extracellular matrix degradation in acne lesions. Inflammation in the microcomedones is initiated by Interleukin-1.

Biofilms are notoriously resistant to antimicrobial therapies and are formed by *Propionibacterium acnes* in acne lesions. Different strains of *Propionibacterium acnes* modulate the cutaneous Toll - like receptor pathway of innate immunity in their own way. For the novel treatment of acnes, Zileuton, a 5-lipoxygenase inhibitor inhibits the pro-inflammatory activity of leukotriene B<sub>4</sub> and stimulation of sebaceous lipogenesis by PPAR $\alpha$  expression and lipid catabolism.

### **Learning points:**

Tissue inflammation is a major component of the acne process. Zileuton, a 5-lipoxygenase inhibitor is a novel anti-inflammatory agent for acne which acts by inhibiting the pro-inflammatory activity of leukotriene B<sub>4</sub> and sebaceous lipogenesis.

of nano-fractional RF in moderate to severe atrophic acne scars. Subjects were treated with three sessions at one month intervals. Fifty percent of the patients demonstrated >50% clinical improvement at six months after the last treatment session. The average pain score was 5.6 out of 10. Adverse effects were mild and transient, including pain, immediate oedema, erythema, scabbing and pigmentary alteration on the treated areas. It is concluded that nano-fractional RF is quite safe and effective in the treatment of atrophic acne scars.

### **Learning points:**

Fractional radiofrequency may be effective for atrophic acne scars. However post-inflammatory hyperpigmentation is a concern in Asian skin types.

## **The efficacy in treatment of acne scars with nano fractional radiofrequency system**

Speaker: Rungsima Wanitphakdeedecha  
Department of Dermatology, Faculty of Medicine, Siriraj Hospital, Mahidol University, Thailand

The speaker shared her experience on using fractional radiofrequency (RF) system for atrophic acne scars, active acnes, striae and RF assisted drug delivery. Fractional radiofrequency is effective for atrophic scars and can also improve facial contouring and skin laxity. However, post-inflammatory hyperpigmentation is a concern in Asian skin types and a longer downtime than fractional ablative laser resurfacing is noted. A study of twenty four subjects was performed to determine the efficacy