The Hong Kong Society of Dermatology & Venereology Annual Scientific Meeting

Reported by W Ngan 顏偉廉, PY Ngan 顏佩欣, CS Au 區志森, OC Lau 劉安祥

Date: 30 June 2019
Venue: Sheraton, Hong Kong
Organiser: The Hong Kong Society of Dermatology and Venereology

Wart therapy

Speaker: RJ Antaya
Department of Dermatology and Pediatrics, Yale University, USA

Salicylate acid, imiquimod cream and cryotherapy are frequently used to treat warts. When these treatments fail, other modalities should be employed. Localised cutaneous hyperthermia to raise the skin temperature to 43 degrees Celsius for 30 minutes per day for three days is effective. To achieve this, we can immerse the affected skin in hot water or use heat patches on the affected area. Immunotherapy can also be employed with the advantage that it can treat warts at remotely affected sites. Intralesional injection using *Candida* or mumps antigen can be used. Other methods include the use of contact sensitisers, such as DPCP.

Learning points:

Apart from usual modalities for wart treatment, heat and immunotherapy can also be used.

Multi-disciplinary management of epidermolysis bullosa

Speaker: J Mellerio
St. John's Institute of Dermatology, United Kingdom

Although the mainstay treatment of epidermolysis bullosa (EB) is supportive, physicians should note the wide range of complications that may occur in EB patients. These include anaemia, osteoporosis, cutaneous squamous cell carcinoma, oesophageal strictures, symblepharon, and microstomia etc. Therefore, a holistic approach requiring multidisciplinary input from dermatologists, paediatricians, nurses, plastic surgeons, and dieticians etc., are necessary. Multidisciplinary clinics serve this purpose so that patients can attend multiple specialists at the same time and optimise their care. As EB is a rare disease and to efficiently manage patients / resources, centres for EB have been set up in the UK. However, for some patients, the burden of travelling is high. Skype clinics, outreach clinics, and community nursing services have been used to overcome these problems with good results.

Learning points:

Multidisciplinary management is important for EB patients. Dedicated centres can concentrate the experience for rare diseases, and innovative methods of follow up may help to bridge the travelling hurdle faced by patients.

Topical steroid phobia

Speaker: PY Ngan
Department of Health, Hong Kong

Eczema is a chronic and relapsing condition with topical corticosteroids as the cornerstone of treatment. Nevertheless, topical steroid phobia has become a growing concern among eczema patients in overseas countries. This is also seen in Chinese adult patients with eczema attending dermatological clinics in the public sector.

With the help of a self-administered scale assessing topical steroid phobia, named TOPICOP©, it was noted that more than half of respondents showed various degrees of concern of topical corticosteroid use which in turn affected compliance. For instance, they agreed that topical steroid was harmful to the skin; they were afraid of putting on topical steroid on certain body parts and stopped the topical steroid treatment as soon as possible.

It is essential for the dermatologist to recognise the impact of topical steroid phobia in adult eczema patients. The findings from evidence-based studies on topical steroids can be used to provide counselling on the use of topical steroids and clear written guidelines on proper topical steroid application are helpful in addressing topical steroid phobia in a busy clinic.

Learning points:

Healthcare professionals play a crucial role in recognising topical steroid phobia in adult eczema patients and should take the lead addressing such concerns.

Stevens-Johnson syndrome and toxic epidermal necrolysis: a 13-year review of patients managed in a tertiary referral centre in Hong Kong

Speaker: C Cheung
Department of Health, Hong Kong

Although not commonly encountered, Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are well-known dermatological emergencies. Based on speaker's 13-year retrospective cohort study in the Prince of Wales Hospital, the annual incidence was 6.04 cases per million. More than 90% of cases were related to medications and more than 80% of them were due to anticonvulsants, allopurinol, antibiotics, or analgesics.

Over half of the study patients were complicated by sepsis, and 17.6% developed multi-organ failure or disseminated intravascular coagulation. The overall in-hospital mortality rate was 22.5%. SJS and TEN carried significant morbidity and mortality among the study patients.

Intravenous immunoglobulin (IVIG) was prescribed in 50% of study patients; the actual in-hospital mortality rate was 13%, while the predicted mortality based on Score of Toxic Epidermal Necrosis (SCORTEN) was 14.24. Survival did not show statistical improvement after the use of IVIG in this study.

Learning points:

SJS and TEN are life-threatening dermatological emergencies which require multidisciplinary care. Drug-induced SJS and TEN were most commonly reported; hence, early identification for the causative agents would help preventing and managing these conditions.

New treatment options for atopic dermatitis

Speaker: M Deleuran
Department of Dermatology, Aarhus University Hospital, Denmark

A substantial number of patients with atopic dermatitis (AD) are not adequately controlled with conventional systemic immunosuppressants. Novel treatments targeting key drivers of underlying inflammation in AD may offer opportunity for sustained symptom control for patients with moderate-to-severe disease, without the side effects from long-term use of topical corticosteroids and systemic immunosuppressants.

Interleukin 4 and 13 (IL-4, IL-13) are key cytokines in AD. Two phase III studies on Dupilumab (anti-IL-4 receptor monoclonal antibody) demonstrated significant and sustained reduction in AD severity and improvement in quality of life. Severe AD, pre-existing conjunctivitis, low serum level of Dupilumab were found to be risk factors for developing conjunctivitis while on Dupilumab treatment.

Both Tralokinumab and Lebrikizumab are IL-13 targeting antibodies. Phase II study of Tralokinumab showed early and sustained improvement in AD symptoms and an acceptable safety and tolerability profile. A phase II study of Lebrikizumab showed that efficacy was only significant with monthly dosing of 125 mg. Its use was associated with an increased frequency of herpes infections and conjunctivitis.

Neomolizumab is an IL-31 (the itch cytokine) receptor antibody which can be given by monthly subcutaneous injections with improvements in pruritus score and sleep parameters.

JAK inhibitors are small molecules. Currently 3 oral JAK inhibitors, Baricitinib (JAK 1+2), Upadacitinib (JAK1) and PF-04965842 (Jak1) are undergoing phase III clinical trials.

Positive result was also noted in phase I study of an anti-IL-17c antibody MOR106.

Learning points:

Anti-IL-4, IL-13, IL-17, IL-31 and JAK inhibitors are emerging treatments therapies for patients with moderate-to-severe disease who require systemic treatment.

Atopic dermatitis lifelong commitment

Speaker: N Konnikov
Boston VA Healthcare System, USA

Atopic dermatitis (AD) affects up to 20% of children and 14% of adults. It usually begins early in life and severity tends to decrease after childhood.

Food allergy may play a major role in the pathogenesis in some infants and children but uncommon in adults. Respiratory allergens, such as house dust mite or pollens, may contribute to the pathogenesis.

Staph aureus (SA) is frequently isolated from the skin during flares. Oozing lesions or intense erythema suggest the possibility of infection. Proliferation of SA is encouraged by reduced competition from the disrupted microbiota and favourable growth conditions, including high pH. Use of antibacterial soap before bathing or bleach bathes can help reduce the S-A burden.

Bathing may reduce pruritus and skin roughness and bath additives such as oatmeal and rice starch may alleviate symptoms. Non-soap cleansers should be considered in-lieu of soaps in patients with AD. Prolonged exposure to water contributes to the development of contact dermatitis by extracting or diluting the hygroscopic natural moisturising factors in the stratum corneum. Guidelines recommend that bathing should not exceed once a day, duration of 5-10 minutes, and to use warm or lukewarm water.

The American Academy of Dermatology (AAD) regards emollients as a cornerstone in AD management plans. An effective approach is bathing followed by emollient application (soak and seal) which helps to replenish lipids and thereby reduces TEWL.

A good emollient is one that is suitable for the whole family. Ideal characteristics include ultra-light weighted texture (oil in water emulsion), physiological pH (5-5.5), unscented, non-comedogenic and one that does not stain clothes.

Learning points:

Proper bathing and emollient use plays an important role in management of AD.

Novel biologic in atopic dermatitis: science and clinical experience in dupilumab

Speaker: Y Tokura
Department of Dermatology, Hamamatsu University School of Medicine, Japan

The atopic dermatitis (AD) is a common inflammatory skin disease which presents with pruritus and recurrent eczematous lesions. From recent scientific research, it was discovered that AD is mediated by the Th2, innate lymphoid cell types 2 and cytokines IL-4 and IL-13. Extrinsic AD is caused by barrier abnormalities like filaggrin mutation or proflaggrin processing abnormality which may induce FLG monomer deficiency, resulting in manifestation of AD e.g. ichthyosis vulgaris and palmar hyperlinearity. Intrinsic AD is usually caused by metal allergy without severe barrier abnormality. It is mediated by Th1 cells and serum IgE is usually normal. Suprabasin deficiency may increase nickle absorption and elevate serum nickel.

Dupilumab is a new biological agent that target IL-4 receptor alpha subunit, blocking the signaling pathway of both IL-4 and IL-13. It causes significant improvement AD symptoms including pruritus.

Learning points:

Dupilumab is promising biological agent for moderate to severe AD.