Hong Kong J. Dermatol. Venereol. (2011) **19**, 35-39

Reports on Scientific Meetings

19th Regional Conference of Dermatology 2010

Reported by WYK Lam 林旭強 and EKY Yau 丘潔怡

Date:	20-23 October 2010
Venue:	Magellan Sutera and Pacific Sutera Hotel Sutera Harbour, Kota Kinabalu Sabah, Malaysia
Organiser:	Dermatological Society of Malaysia

Consensus guidelines: Management of chronic urticaria in Asia 2010

Prepared by the Asian Academy of Dermatology and Venereology (AADV) Study Group

Chronic urticaria is defined as urticaria lasting more than six weeks. It can be provoked by a wide variety of agents and conditions including drugs, foods, physical factors, infections, inflammatory processes and systemic disorders. Given the fact that chronic urticaria may recur over a prolonged period of time, it potentially causes a great disturbance to both patients and caregivers. The aim of management is to identify and eliminate causative agents or triggers as well as to achieve complete symptom relief.

Remission of symptoms can be attained by blocking the action of histamine which is the main mediator of urticaria. Non-sedative second generation H_1-antihistamines that have good safety profile are recommended as the first line therapy for patients with chronic urticaria. It is advised the antihistamines should be taken on a regular basis and prescribed with reference to individual response, age, pregnancy and health status. Non-sedative second generation H_1-antihistamines are also given as first line therapy to children with dosage adjustment according to their body weight. For pregnant women, safety data is limited to loratadine. Of note, the routine use of old sedating first generation antihistamines is not recommended.

When there is no satisfactory clinical response after 2 weeks of first line therapy, updosing of the same non-sedative antihistamines (up to 4 times the standard dose) is recommended as a second line treatment. For Asians, it is generally accepted that smaller increments of non-sedative antihistamines can be considered due to the smaller body builds.

Third line therapy can be initiated if symptoms persist after a further 1 to 4 weeks. Antileukotriene medications such as leukotriene receptor antagonist or 5-lipoxygenase inhibitor can be added to the non-sedative H_1-antihistamines. Alternatively, substitution with another non-sedative H_1-antihistamine may be considered as third line treatment. The leukotriene receptor antagonists (zafirlukast 20 mg twice daily and montelukast 10 mg once daily) have been demonstrated to be effective in the treatment of chronic urticaria, especially in non-steroidal anti-inflammatory drugs and food additives aggravated subtypes. Zileuton, a 5-lipoxygenase inhibitor, was also reported as an effective treatment for chronic urticaria. Systemic corticosteroids may be given for 3 to 7 days during exacerbation of symptoms. However, in view of the known adverse effects, prolonged use of corticosteroids is not

recommended except in conditions that respond poorly to antihistamines, such as delayed pressure urticaria and urticarial vasculitis.

Fourth line therapy is considered when symptoms persist for even further 1 to 4 weeks. Adding cyclosporin A to non-sedating antihistamine can be an option for fourth line treatment. Cyclosporin A up to 5 mg/kg/day has been shown to be effective in treating severe resistant urticaria. Nevertheless, long term therapy with cyclosporin A has not been shown to be advantageous over short term therapy. Other alternative treatments including addition of H_2-antihistamine, dapsone or omalizumab have been suggested.

There are a few other possible treatments being used to treat chronic urticaria. High dose intravenous immunoglobulin has been shown to offer some benefits in chronic urticaria. Plasmapharesis was reported to be useful in patients with autoantibody positive severe chronic urticaria. Oral tacrolimus, low dose methotrexate, hydroxychloroquine, sulphasalazine and dapsone have been shown to be effective in chronic urticaria. In cases of autologous serum skin test negative chronic urticaria and angioedema unresponsive to antihistamines, warfarin is a treatment of choice.

Treatments such as tranexamic acid and sodium cromoglycate in chronic urticaria, colchicine and indomethacin in delayed pressure urticaria, and nifedipine in dermographism should not be considered because they have been proven to be ineffective in double-blind, placebo-controlled studies.

Non-pharmacological therapies have been used to treat chronic urticaria. Soothing lotions (0.5%-1% menthol, calamine in aqueous cream/lotion, 10% crotamiton lotion) and frequent tepid showers can be tried when wheals appear. Effectiveness of phototherapy was studied, however the results were inconclusive. The high prevalence of psychological symptoms in chronic urticaria suggests that complementary psychotherapy may play a role in symptomatic relief. Relaxation under hypnosis has been shown to reduce itchiness, but there is no significant effect on the number of hives.

Learning points:

A structural approach in treatment of chronic urticaria for Asian patients is important in clinical settings. Non-sedative second generation H_1-antihistamines should be the first line treatment in chronic urticaria.

HPV vaccines: Current experience and safety

Speaker: Dr. Suresh Kumarasamy
Consultant Obstetrician & Gynaecologist and Gynaecological Oncologist, Gleneagles Medical Centre, Penang, Malaysia

Human papillomavirus (HPV) genotypes 16 and 18 are associated with 70% of cervical cancer, while HPV genotypes 6 and 11 contribute to 95% of genital warts. Currently, there are two HPV vaccines available in the market, namely bivalent and quadrivalent HPV vaccines. The bivalent HPV vaccine offers protection against HPV genotypes 16 and 18, whereas the quadrivalent vaccine protects against HPV genotypes 6 and 11 in addition to genotypes 16 and 18.

Around 18,000 girls and women aged 16 to 26 years were studied in phase III trial of the quadrivalent HPV vaccine. It demonstrated that in women who had not been infected by HPV genotypes 6, 11, 16 or 18, quadrivalent vaccine gave nearly 100% protection against precancerous cervical lesions and genital warts caused by these genotypes. Hence in 2006, the quadrivalent HPV vaccine was approved by the Food and Drug Administration (FDA) for protection against precancerous lesions of cervix, vagina and vulva, and genital warts in

girls and women aged 9 to 26 years. Another study showed that the quadrivalent vaccine was effective in prevention of external genital and anogenital infections in boys and men aged between 16 and 26 years. In 2009, the vaccine was further approved by the FDA for protection against external genital warts in boys and men aged between 9 and 26 years.

For the bivalent vaccine, it was shown to offer similar efficacy in protection against precancerous lesions of cervix by the phase III trial and was approved by the FDA in 2009.

Safety of HPV vaccine was addressed by a number of monitoring systems e.g. the Vaccine Adverse Event Reporting System (VAERS) of the FDA. Up to 31st May 2010, there were 29.5 million doses of quadrivalent vaccines administered in the United States. 16,140 adverse events were reported under VAERS. Among those adverse events, 8% were serious with 29 confirmed deaths. None of the death cases was considered to be related to the vaccines. The FDA stated that quadrivalent vaccine was safe and effective with its benefits outweighing the risks. For the bivalent vaccine, the Medicines and Healthcare Products Regulatory Agency of the United Kingdom concluded that the benefits of bivalent vaccine outweigh its risks.

Learning points:

To date, the quadrivalent and bivalent HPV vaccines are safe and effective, and their benefits outweigh the risks.

Propranolol for infantile haemangiomas: experience from Great Ormond Street Hospital

Speaker: Professor John Harper
Professor of Paediatric Dermatology, Great Ormond Street Hospital for Children and University College London (Institute of Child Health), London, United Kingdom

Complicated infantile haemangiomas can lead to significant disfigurement and impairment of vital organs. Recent observations showed favourable effects of using propranolol in complicated haemangiomas. From July 2008 to April 2009, there was a case series of thirty infants who suffered from complicated haemangiomas and received treatment of oral propranolol with satisfactory results.

Among the thirty infants, twenty-seven were girls and three were boys with a mean age of 5.8 months at the start of treatment. Nine had previously received systemic corticosteroids treatment for haemangioma with inadequate response. Ten patients suffered from large facial haemangiomas and three had subglottic haemangiomas. Nine patients had periocular haemangiomas compromising visual function and six patients had nasal haemangiomas complicated with partial nasal obstruction. Ulceration occurred in ten patients.

In this case series, treatment regimen of propranolol was decided according to the management protocol established by the Great Ormond Street Hospital in London. Baseline blood tests, electrocardiogram, echocardiography and abdominal ultrasound were initially performed as pre-treatment evaluation. Propranolol was started at an initial dose of 1 mg/kg/day and was given orally in three divided doses. Dosage was increased to 2 mg/kg/day after 1 week. Blood pressure and heart rate were closely monitored at 30-minute intervals for a 4-hour period after the first dose of treatment and one week later during the updosing. In addition, measurements of blood pressure and heart rate were performed twice

weekly on outpatient basis during the first two weeks and once weekly thereafter. During monthly follow up, the dosage was adjusted according to body weight until the age of nine months, then the same dosage was given till gradual cessation at 1 year old. Treatment period could be varied among individual cases, depending on the clinical response. Propranolol was discontinued gradually by halving the dose every two weeks for twice.

All haemangiomas stopped enlarging and became paler after using propranolol. Twenty-six patients had clinical response within the first week and other four patients responded within a month. Continued improvements were observed thereafter. Treatment was particularly effective in subglottic haemangiomas in which stridor resolved within 24 to 48 hours after initiation of treatment. Rapid healing of small and superficial ulcers was observed. Nevertheless, for large and deep ulcers, there were only limited treatment response and worsening of ulceration was witnessed despite the use of propranolol. Only three patients had adverse event of hypotension, which was asymptomatic.

Mechanism of action for propranolol in treatment of infantile haemangioma is yet unknown. It is thought to be related to vasoconstriction, reduced expression of vascular endothelial growth factor and basic fibroblast growth factor, and induction of apoptosis. This study demonstrated the effectiveness of propranolol in both proliferative and non-proliferative phases. Impressive results were observed for subglottic and large complex haemangiomas with improvements in general well-being. Comparing with corticosteroids, propranolol offered more rapid clinical response and adverse effects were well tolerated. However, haemangiomas may increase in size once propranolol is stopped, children should therefore be monitored for any deterioration such as recurrence of obstructive symptoms after cessation of treatment. Despite the encouraging results, optimal treatment regimen of propranolol for complicated haemangiomas remains unclear and there is a need for more researches to define the most appropriate dosage and treatment duration.

Learning points:

Treatment of propranolol was rewarding for infantile haemangioma but it should be reserved for infants with haemangiomas which potentially cause serious complications. Treatment should be initiated and supervised by specialist centre with paediatric cardiology support.

Managing the challenges of scalp psoriasis

Reported by CK Kwan 關志強

Date:	18 November 2010
Venue:	Sheraton Hong Kong Hotel and Towers
Speakers:	Dr. Karsten Fogh, Associate Professor, Department of Dermatology, Aarhus University Hospital, Denmark and Dr. Chi-keung Yeung, Associate Consultant, Division of Dermatology, Department of Medicine, Queen Mary Hospital, Hong Kong
Organiser:	Hong Kong Society of Dermatology and Venereology

The worldwide prevalence of psoriasis is around 1.5-2% in which around 50-80% of them having scalp involvement. The main symptoms include pruritus, scaling, embarrassment and so on. The current treatment options for scalp psoriasis are topical steroid, calcipotriol, selenium sulphide and tar shampoo. Drug compliance is one of the main problems. Topical steroid is fast in onset but the long-term safety is not well documented. Vitamin D analogue is slow in onset but can be safely and repeatedly used. It also has steroid sparing effect. The optimal treatment for scalp psoriasis should be high in efficacy and is convenient for patient (such as single daily dose). It should also be formulated in a vehicle acceptable to patient and is safe for long term usage.

Xamiol® combines both betamethasone dipropionate and calcipotriol in a lipophilic vehicle. A clinical trial recruiting around 3000 psoriatic patients over 18 years old with greater than 10% surface area scalp involvement found that Xamiol® had higher efficacy. Around 58% of patients reported absent or mild disease after two weeks of treatment which was significantly higher than other treatments, including betamethasone alone, calcipotriol alone and placebo. There was also a significant improvement in total sign score after two weeks of treatment and the efficacy was maintained up to eight weeks. Less than 1% of patients receiving Xamiol® had the adverse effects due to the steroid component like glaucoma, folliculitis, impetigo, acne and rosacea and no patient had skin atrophy and striae. Moreover, patients in Xamiol® group had their quality of life improved significantly. Dr. Fogh concluded that Xamiol® was a highly efficacious and safe treatment in scalp psoriasis.

Dr. Yeung shared his experience on Xamiol® after a small local clinical trial. The study was a single arm open label study of once daily use of Xamiol® in 20 patients with moderately severe scalp psoriasis for 4 week. It was found that around 40% of patients had absent or mild disease. Their quality of life was also improved.

Learning points:

Compound of topical steroid and vitamin D analogue in a lipophilic vehicle is effective in improving the sign and symptoms as well as the quality of life of patients with moderately severe scalp psoriasis.