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Reports on Scientific Meetings

Annual Scientific Meeting 2021

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Urogenital *Mycoplasma genitalium* (MG) infection

Speaker: KF Cheng
Social Hygiene Service, Department of Health, Hong Kong

MG is one of the major curable causes of sexually transmitted infection (STI) worldwide. It is common among non-gonococcal urethritis (NGU) and non-chlamydial non-gonococcal urethritis (NCNGU) patients. Some patients acquired MG is asymptomatic and may not develop disease. However, infection in women may cause adverse female genital tract complication. Nowadays, nucleic acid amplification tests (NAAT) are regarded as the standard of diagnosis. Nevertheless, MG test is only recommended in clinically indicated conditions and not for routine STI screening.

Mycoplasma is resistant to most beta-lactam antibiotics. The main challenge to treatment is the ever rising rate of the anti-microbial resistance (AMR) MG strains. Macrolide resistant is common in Hong Kong and many parts of the world. The rate of fluoroquinolone resistant is rising and becoming a problem. For uncomplicated MG infection, most guidelines suggest the sequential therapy with doxycycline and extended course of azithromycin, and moxifloxacin will be reserved for the failing cases. For complicated MG infection, moxifloxacin (with or without doxycycline) will be the choice of first line treatment.

Learning points:

a. MG is one of the curable cause of STI.
b. NAAT are now the standard of diagnosis.
c. Sequential therapy with doxycycline and extended course of azithromycin is the recommended treatment for uncomplicated cases. Moxifloxacin should be reserved for the failing cases or complicated MG infection.
d. Anti-microbial resistance is currently a serious problem for MG treatment. AMR should be managed with sensible MG testing, ongoing MG surveillance and optimise the use of antimicrobials.

Practical recommendations for the topical treatment of atopic dermatitis in South and East Asia

Speaker: D Luk
United Christian Hospital & Hong Kong Children's Hospital, Hong Kong

The algorithm outlining the topical treatment of mild-to-moderate Atopic Dermatitis (AD) was introduced. It was developed based on treatment guidelines, relevant literature and local treatment practices. The mainstay is regular use of emollients during acute and maintenance phase to maintain skin hydration and reduce water loss. When selecting appropriate topical anti-inflammatory treatment, factors including the patient's age, site of the affected areas, attitude to treatment options e.g. corticophobia and side effects of previous steroid therapy have to be considered. Topical corticosteroids (TCS) are still the main therapy for flares uncontrolled by adequate skin care and moisturisers, as recommended by the Asian Academy of Dermatology and Venereology Expert Panel on AD. However, its use has some limitations. These include skin atrophy, damage of the skin barrier, increase in skin infections, systemic absorption and hypothalamic-pituitary-adrenal axis suppression. Topical calcineurin inhibitors (TCIs) have similar efficacy to low-to-mid potency TCS. It may be considered as an alternative to TCS, in particular in sensitive skin areas including face, neck and skin flexures. A maintenance treatment involving regular application of emollient and twice-weekly application of a TCI to previously affected areas is encouraged to reduce the risk of flares.

Learning points:

Topical calcineurin inhibitors may be considered as an alternative to TCS in particular in sensitive skin areas.

Overview on paediatric psoriasis management

Speaker: D Orchard
The Royal Children's Hospital, Melbourne, Australia

Paediatric psoriasis is a common disorder with significant morbidity. A significant proportion of adult cases of psoriasis develops in children. Psoriasis presents differently in paediatric patients to adults, with different clinical presentations and impact on quality of life, parents' expectation, compliance and needle phobia. Early diagnosis and early intervention are important in order to maintain clearance, limit severity of the disease and reduce the psychological stress to the patient. Treatments including topical treatment and narrowband UVB (NBUVB) are similar as in adults. However, use of NBUVB was complicated by lack of ability to cope with treatment, lack of motivation and concern about use in fair skin. Systemic treatments, including methotrexate and acitretin, have same threshold as for adults. Cyclosporin can only justify if desperate, severe cases and for short term use. Biologics could be considered when the psoriasis is significant enough to require long term suppressive therapy.

Learning points:

Early intervention for paediatric psoriasis is important in order to limit severity of the disease and reduce the psychological and emotional stress.

Clinical experience with biologics in paediatric psoriasis

Speaker: D Orchard
The Royal Children's Hospital, Melbourne, Australia

Biologics have been use in the the treatment of moderate to severe plaque psoriasis for adults. Research on biologics has recently been extended to children. Clinical cases were presented and overview of some paediatric biologic studies was discussed. In summary, studies have shown that biologics treatment for psoriasis was efficacious, safe and well tolerated, with no specific concerns in the paediatric population when compared to adults. Choice of treatment on paediatric psoriasis depends on the patient's comorbidities, impact on quality of life, and relevant safety aspects. Factors to consider when choosing different biologics in paediatric psoriatic patients include the presence of comorbidities and psoriatic arthropathy, the frequency of injection, and family history of response to biologics therapy.

Learning points:

There were emerging evidence on the use of biologics in terms of efficacy and safety for the management of psoriasis in children.

Real world experience in Guselkumab prescription in psoriasis treatment in Hong Kong psoriasis patients

Speaker: Y Chan
Matilda International Hospital, Hong Kong

Current available biologics for moderate-to-severe psoriasis in Hong Kong included TNF-α inhibitors (Etanercept, Infliximab, Adalimumab and Certolizumab), IL-12/23 inhibitor (Ustekinumab), IL-17A (Secukinumab, Ixekizumab and Brodalumab) and IL-23 inhibitors (Guselkumab, Risankizumab).

Guselkumab (GUS), a fully-human monoclonal antibody, is the first selective IL-23 inhibitor for the treatment of moderate-to-severe psoriasis. A retrospective single-center study of local Chinese psoriasis patients on GUS for 20 weeks showed a statistical improvement of mean PASI from 17.5 at baseline to 2 at week 20. 72% of patients achieved PASI-90 and 47% patients achieved PASI-100. The adverse events reported include allergic rhinitis, upper respiratory tract infection, urticaria, folliculitis and injection site reaction. All events were considered mild in severity and manageable. In the subgroup analysis of PASI response, sex and body weight were not found to affect PASI-90/100 response, however PASI-90/100 rates appeared to be higher in female, older (>40 years) and lighter (<=75kg) patients. Moreover, biologic naive patients were found to achieve better clinical outcome. Lastly, the switch to GUS were mainly due to secondary failure of previous biologics.

In reflecting the clinical outcome, there is an increasing trend to use absolute PASI response than PASI percentage change. In clinical trial setting, baseline absolute PASI score were used where patients had "wash-out" period before the trial. However, in the real-world clinical practice, baseline PASI score may not truly reflect the severity as many patients were switched directly from another treatment and it would be unethical to stop the prior therapy to investigate the severity of the psoriasis. The mean absolute PASI value are usually higher in the clinical trial patients and a seemingly higher PASI percentage response would be encountered in trials, which may not be expected in real-world practice. Therefore, some recent treatment guidelines have suggested an absolute PASI <3 as a relevant treatment goal in clinical practice. Moreover, an absolute PASI ≤ 2 was found to correspond with PASI-90 response and is a relevant disease end point for treat-to-target approach in psoriasis.

Learning points:

Guselkumab shows clinically significant effects in the treatment of psoriasis.

The emerging treatment paradigm for atopic dermatitis: What to expect?

Speaker: E Simpson
Oregon Health & Science University, USA

Atopic dermatitis (AD) is a challenging disease which comes with many psychological and physiological burdens. Current available treatments include topicals (corticosteroid, Tacrolimus, Pimecrolimus and Crisaborole), phototherapy and systemic therapies (Cyclosporine, Methotrexate, Mycophenolate, Azathioprine, Dupilumab and JAK inhibitors). Systemic therapy is indicated when aggressive topical treatment does not achieve adequate control of disease and there is a large impact on the quality of life. One should also ensure adequate patient/carer education and good drug compliance, address any superimposed cutaneous infections and exclude alternative diagnosis. Phototherapy should also be considered before systemic options.

Dupilumab has been found to have an excellent long-time safety over 3 years, efficacy was also found to improve over time in "non-responder". It is safe and effective in elderly AD and there are reports of safety in HIV and HBV carrier patients. Moreover, efficacy of dupilumab was shown in different phenotypes of AE including lichenified/exudative flexural dermatitis, prurigo, nummular, generalised eczema with inflammatory pattern or lichenoid pattern and erythroderma. Side effects include conjunctivitis and facial dermatitis. Lastly, no laboratory monitoring for any age is needed.

Other emerging treatments for AD are under investigations, this included anti-IL13 (Tralokinumab, Iebrikizumab), anti-IL31 (Nemolizumab) and JAK inhibitors. Tralokinumab was found to have a slower onset but long-lasting effect. The efficacy, tolerability and safety of JAK inhibitors depend on the molecule and dose. They were found to improve itch rapidly within days but attention should be paid to the side effects, which include headache, nausea, vomiting, acne, infections (herpes simplex, herpes zoster, severe infections), venous thrombosis and major adverse cardiovascular events. Moreover, the United States Food and Drug Administration has recently added a black box warning for Tofacitinib, Baricitnib and Upadacitinib as there has been increased risk of serious heart-related events, cancers, blood clots and deaths. Therefore, systemic JAK inhibitors should be considered when patients prefer oral and flexible dosing or require a quick response, or when there is inadequate or loss of response to Dupilumab. JAK inhibitors should not be used when there is a history of malignancy, severe infection, thrombosis, or when there is severe renal or liver disease, pregnancy and breastfeeding.

Learning points:

Dupilumab is an effective therapy inmany types of AD with proven long-term efficacy and safety. Careful patient selection for JAK inhibitors is important due to long-term safety concerns.

Treat psoriasis for the long haul: Findings on Ixekizumab from clinical trials and real-world evidence

Speaker: PCM van de Kerkhof
Department of Dermatology Radboud University Nijmegen Medical Center, the Netherlands

Current guidelines for psoriasis treatment advocate for almost clear in clinical severity, thus more effective biologics are in need. It is also important to have a fast onset of improvement, especially for those with unstable disease and to minimise the chance of stigmatisation and adverse impact to patient's quality of life.

Ixekizumab (IXE) demonstrated higher complete clearance rate when compared to other biologics in head-to-head trials and patients on IXE achieved greater rapid skin improvement when compared to Etanercept and Ustekinumab. During long term treatment up to 52 week, 80% reached PASI-90 and 77% maintained PASI-90; the clinical response was maintained up to 5 years. For psoriatic arthritis, IXE is comparable to Adalimumab. Network meta-analysis found that IXE achieved high level of complete clearance when compared to other biologics. In a multicenter retrospective study in Spain, the response to IXE was not found to be affected by body mass index (BMI), disease duration or the presence of psoriatic arthritis. Also, biologics naive group showed significant higher PASI-75 at week 12-16 when compared to those with history of biologics use. Moreover, drug survival was higher for IXE compared with Secukinumab. Most common reported side effects include nasopharyngitis, upper respiratory tract infection, injection site reaction, headache, arthralgia, back pain, bronchitis, hypertension and sinusitis. Lastly, patients not responding to Secukinumab can be switched to IXE as efficacy and safety of anti-IL17 should be regarded as a molecule effect instead of a class effect.

Learning points:

Ixekizumab provides fast improvement and sustainable control for the long haul. Majority of patients can achieve clearance or near clearance clinically.