TOP 5 Research and Clinical Papers

1. Subcutaneous methotrexate shows favorable risk-benefit profile in treatment of moderate to severe plaque psoriasis


Summary
The evidence for methotrexate, one of the most commonly used systemic drugs for psoriasis, is limited to oral dosing. This is the first study on subcutaneous methotrexate (MTX) compared with placebo in patients with psoriasis. Adult patients naive to methotrexate were randomized 3:1 to MTX 17.5 mg/week or placebo for the first 16 weeks. After 16 weeks, all patients were treated with MTX in combination with folic acid 5 mg/week. Patients remained on the same dose unless they had not reached PASI 50 at 24 weeks of MTX treatment. In that case, they could be escalated to MTX 22.5 mg/week. Primary efficacy endpoint was PASI 75 after 16 weeks, analyzed by modified intention to treat with non-responder imputation. The study contained 120 patients. At week 16, PASI 75 response was achieved in 41% of patients on MTX versus 10% in the placebo group. Subcutaneous MTX was generally well tolerated. Serious adverse events were seen in 3 patients (3%) who received MTX for the full period of 52 weeks. The study shows a favorable risk-benefit profile of subcutaneous MTX, as well as the beneficial effect of updosing in patients with insufficient response.
Dear Colleagues,

Greetings and welcome to the July 2017 issue of the IPC Psoriasis Review newsletter. As we begin the second half of the year, I am pleased to report that IPC is continuing to make substantial strides forward in furthering our mission to advance the care of people living with psoriasis worldwide through education, research and advocacy – all key goals of our new strategic plan.

IPC’s recent participation in the National Annual Conference of Chinese Society of Dermatology in Chongqing, China, is a perfect example. In May, we joined the Chinese Psoriasis Committee (CPC) in presenting an International Psoriasis Symposium and a Meet the Experts educational program. We were delighted with the tremendous interest shown at both events by attendees from China and other Asian countries.

This collaboration with the CPC was a direct result of IPC’s commitment to participate in at least one event in Asia every year, a commitment that will strengthen our efforts to expand our organization’s presence around the world.

Another IPC commitment is to increase our participation in congresses in Latin America. In May, we conducted two events – a meeting of IPC’s Latin American Working Group and a Meet the Experts educational program – at the Reunión Anual de Dermatólogos Latinoamericanos, or RADLA (Annual Meeting of Latin American Dermatologists) held in Bogotá, Colombia.

We look forward to forging similar partnerships in Pretoria, South Africa, and in Cairo, Egypt, when we hold Meet the Experts programs during the South African Dermatological Society Annual Meeting in August and the 2017 Sharm Derma Congress in October.

Our education efforts this year have also included two symposia that IPC conducted at the 2017 American Academy of Dermatology (AAD) Annual Meeting in March and a research symposium at the 76th annual meeting of the Society for Investigative Dermatology in April. You’ll find summaries of these meetings on pages 10-17 and 20-21.

On the research front, the respected British Journal of Dermatology has accepted for publication an IPC-produced article that details the global health challenges presented by psoriasis and cites our ambitious plan to create a Global Psoriasis Atlas that will document the worldwide prevalence of the disease.

The article, titled “The Global State of Psoriasis Epidemiology: A Workshop Report,” describes the need for the atlas as a leading resource on the epidemiology of the disease. IPC is partnering with the International League of Dermatological Societies (ILDS) and the International Federation of Psoriasis Associations (IFPA) to develop the atlas.

Also in this issue:

- In a p. 23 Q&A interview as IPC’s new board president, I outline my vision and goals for the organization as we continue to expand our global influence.
- A Newsmakers column on p. 26 lists the impressive hard work and achievements of several IPC board members councilors.
- You will meet three new IPC councilors: Kelly M. Cordoro and Robert E. Kalb, both of the United States, and Siew Eng Choon of Malaysia.
- Our regular “Top 5” feature comprises reviews of the five most significant research and clinical papers nominated and chosen earlier this year by IPC councilors.

Finally, I want to acknowledge and thank this issue’s scientific co-editors, Dr. Elke M.G.J. de Jong, Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands, and Dr. Murlidhar Rajagopalan, Apollo Hospital s, Chennai, India.

We hope you will find this issue interesting and informative. I am grateful for the expertise and time you all freely give to accomplish IPC’s mission and to achieve our vision of a world without psoriasis.

With best wishes,

Alexa Boer Kimball, MD, MPH
President, International Psoriasis Council
COMMENTARY  This well-performed, randomized trial closes the gap in the evidence for methotrexate, which has been and still is an important drug for patients with psoriasis. The evidence regarding efficacy and safety is complemented by patient-reported outcome measures and histological analyses of skin biopsies. Dermatology Quality of Life Index (DLQI) ≤5 was seen in 59% of patients treated with MTX and a DLQI score of 0-1 in 43% of patients, versus 34% and 10% in the placebo group at 16 weeks. The percentage of serious adverse events was low (n=3) and was attributed to the categories gastrointestinal, decreased white blood cell count, and hepatic enzyme increase, necessitating permanent discontinuation of treatment. In addition, biopsies were taken at baseline and 16 weeks, which correlated well with PASI especially when PASI 75 or better was reached. Evidence available before this study virtually consisted of orally administered methotrexate only. In addition, evidence about dosing strategies was sparse in dermatology. This study provides the important first step in gathering evidence: a randomized, placebo-controlled study on the effects of subcutaneous MTX in psoriasis patients. Although a head-to-head trial is needed to determine the difference between oral and subcutaneous MTX regarding effects and side-effects, this study by Warren et al provides unique and important evidence that helps to guide future recommendations for optimum dosing of MTX.

– Dr. Elke MGI de Jong

For additional copies of the IPC Psoriasis Review newsletter, or to learn more about IPC, please visit www.psoriasiscouncil.org.
2. Differences in immune regulatory genes help distinguish mild vs severe psoriasis


Summary

The delineation between mild and severe psoriasis is commonly performed by clinical measures such as Psoriasis Area Severity Index (PASI) and body surface area (BSA). This study performed analysis of skin biopsies from 34 adult patients with mild psoriasis (mean PASI score 5.5) and 23 patients with severe disease (mean PASI score 23.2). Biopsies were taken from a representative plaque in untreated patients. There were no differences in sex, age, or disease duration between the patient groups. Biopsies were analyzed for histologic features, cytokine expression, messenger RNA expression, and gene expression for disease response pathway activation. Histological features showed that CD3+ T cells and CTLA4+ T cells were more abundant in both epidermis and dermis of mild psoriasis compared to severe psoriasis. A panel of disease-associated cytokines showed higher expression in mild psoriasis compared with severe psoriasis (Th17-regulated cytokines and Th1-regulated cytokines, as well as the expression of immune-mediated regulatory molecules). The expression of driver inflammatory cytokines decreased as the disease severity increased. Similarly, the expression of negative immune regulatory molecules decreased as the disease severity increased. Messenger RNA expression showed separate clustering of mild and severe psoriasis: mild psoriasis showed higher expression patterns of T-cell activation, Th17-regulated cytokines, Th1-regulated cytokines, and negative immune regulation compared with severe disease. In addition, disease response pathway activation was investigated using gene set variation analysis (GSVA). Both mild and severe psoriasis skin highly expressed psoriasis transcriptome, with higher GSVA scores for mild compared with severe psoriasis. In conclusion, mild psoriasis was characterized by higher numbers of T cells in skin lesions, higher IL-17A expression, and stronger expression of the core psoriasis transcriptome. In contrast, severe psoriasis was characterized by stronger expression of some epidermal response genes. However, the key molecular distinction was higher expression of negative immune regulatory genes in mild lesions compared with severe psoriasis lesions.

COMMENTARY

The current paradigm in psoriasis is that severity of psoriasis is associated with more inflammation of skin and even systemic inflammation. This study shows important evidence that changes this paradigm. The investigators found that mild psoriasis skin lesions have a higher density of immune infiltrates, higher expression of IL-17 and downstream induced products, and overall higher global genomic score for molecular disease alterations compared with more severe disease. Skin lesions from patients with mild disease also have increased expression of negative immune regulators compared with those with severe disease. Numbers of T cells in psoriasis skin and T-cell proliferation seem to be important factors in progression from mild to severe disease, and facilitated by less effective immune regulations in patients who develop more extensive psoriasis lesions. The strength of this study is that a variety of methods are used to strengthen these surprising but very robust findings. Measuring PASI and BSA may not be sufficient in future psoriasis research to determine the severity of skin involvement in psoriatic disease. -EdJ
3. Study of IL-1 and IL-36 roles in generalized pustular psoriasis may lead to more targeted, effective drug therapy


Summary
This study from the Journal of Allergy and Clinical Immunology investigated the expression of IL-1 and IL-36 in generalized pustular psoriasis (GPP). The various cytokines involved in psoriasis were examined by gene expression studies in paraffin-embedded sections from lesional skin. GPP was compared with psoriasis vulgaris (PV). Significant contributions of IL-17A, TNF, IL-1, IL-36, and interferons in both diseases were detected in both variants, but GPP had higher IL-36 and IL-1 expression and lower IL-17A and IFN-g mRNA expression than PV lesions. The investigators detected prominent IL-36 expression by keratinocytes proximal to neutrophilic pustules and it was also shown that proteases from neutrophils activated IL-36. The protease inhibitors serpin A1 and A3, which are inhibitors of elastase and cathepsin G, were also detected in both diseases and inhibited IL-36. These findings explain why many standard treatments for PV, such as acitretin, cyclosporine and even TNF-α blockers, do not seem to work well in GPP. The data from this paper provides a basis for targeted effective drug therapy in GPP, which is characterized by periodic neutrophil infiltration into the skin and development of pustules. There was a strongly enhanced expression of the neutrophil chemokines CXCL1, CXCL2, and CXCL8 (IL-8) in GPP, which enhanced the induction of neutrophils into the epidermis. Compared to PV, there were between 5 to 15 more transcripts of these chemokines, thus establishing a clear difference in the pathomechanism of the two conditions. IL-1 has three isoforms, IL-35 alpha, beta, and gamma. They drive the keratinocyte inflammatory process and synergize with the rest of the inflammation in the skin. TNF-α is a central mediator in chronic plaque psoriasis as evidenced by the effectiveness of therapies that block TNF-α activity. Infliximab has most commonly been used for GPP and PV among the TNF-α blockers. This is because of the inhibition of the synergy between TNF-α and IL-36 and other cytokines. This study also detected increased IL-17A activity in GPP lesions, opening up an area of targeted therapy for GPP.

COMMENTARY The targeted therapy of various phenotypes of psoriasis was ushered in with the onset of biologics in the early 2000s. Subsequently, much of the research has focused on making therapy with biologics safer and more effective. With this in mind, researchers began looking at patients with psoriasis who failed standard biologic therapy or developed adverse effects to the older generation of biologics, and a new generation of drugs emerged. Basic research into pathomechanisms, such as this study, proved that specific subsets will require specific treatments. Research has shown that GPP is often difficult to treat with TNF-α blockers alone. This unique study by Johnston et al will show the way toward the use of biologics that target IL-36 in GPP. In addition, some reports describe the use of anakinra, an IL-1 receptor antagonist, already available, to treat GPP. Laboratory evidence will stimulate large GPP trials with this drug and similar agents. Eventually, patients who have GPP may be treated with shorter courses of a specific biologic than currently available. This is an important concept in which treatment of psoriasis is becoming less cumbersome and less expensive, while, at the same time, more precise and personalized.

-Dr. Murlidhar Rajagopalan
4. Biologic treatments seem to reduce progression of coronary artery disease in patients with severe psoriasis


**Summary**
This study describes the association of clinically effective biologic treatments with reduced coronary artery disease (CAD) progression in patients with severe psoriasis, measured with coronary computed tomography (CT). The authors investigated whether biologic therapy is associated with changes in coronary artery progression. The design of the clinical study was single-center, prospective, controlled, observer-blinded. It compared patients with severe psoriasis initiating biological therapy with matched controls not receiving systemic therapy. CT was performed at baseline and after 13 months of treatment in 28 patients treated initially with adalimumab (n=21), etanercept (3), infliximab (1) or ustekinumab (3) and 28 matched controls. Both groups were comparable regarding patient characteristics and cardiovascular risk factors except for Psoriasis Area Severity Index (PASI) 15.4 (SD 4.3) versus 12.4 (SD 3.9) (p = 0.01). Coronary artery calcium scores (CAC) remained stable in the intervention group, whereas the control groups showed progression. The number of segments with luminal abnormalities remained unchanged in both groups, but severity of luminal narrowing increased in the control group whereas the intervention group remained stable. Disease control in the intervention group was good during the study period, with a mean PASI reduction of almost 88%. The authors conclude that clinically effective treatment with biologics was associated with reduced CAC progression in patients with severe psoriasis, which supports a beneficial effect of biologic treatment in preventing cardiovascular disease progression in patients without symptomatic coronary artery disease.

**COMMENTARY** Although inflammatory pathways of psoriasis share similarities with the mechanisms identified in atherosclerosis, the effect of anti-inflammatory drugs on the development of coronary atherosclerosis is largely unknown. Studies about psoriasis and cardiovascular disease are increasingly published and much attention is drawn to this important field of research. Literature about the effect of biologic treatment on CAD in patients with psoriasis is sparse. This study adds important evidence to the influence of anti-inflammatory treatment with biologics on parameters for coronary artery diseases (CADs). The patients in the group treated with biologics showed a reduced progression of CAC together with a clear improvement of PASI score and a decrease of mean serum levels of C-reactive protein (CRP) during the study. In the control group, CRP did not decrease, but this group started already at a lower mean CRP level. As psoriatic arthritis (PsA) can influence CRP, it would have been interesting to see whether patients with concomitant PsA were present and whether the effects in these patients could be even larger. Confirmation of the beneficial effect of highly effective anti-inflammatory psoriasis treatments on CAD is important to further strengthen the observations of this important study. Their findings can lead to a tool to improve the prognosis of patients with severe psoriasis and asymptomatic CAD and prelude a significant change in patient care. -EdJ
5. Ixekizumab shows high-level response in clinical trials


Summary
This paper reports the effects of treating psoriasis patients with ixekizumab, an IL-17 blocker. Three trials with this drug are covered: UNCOVER 1, 2, AND 3. All were phase-3 trials with 1,296, 1,224 and 1,346 patients, respectively. Twelve-week data are reported from UNCOVER 1, while 60-week data are reported from UNCOVER 2 AND 3. In UNCOVER 2 and 3, after initial allocation of ixekizumab, etanercept was allocated randomly to additional cohorts. At week 12, 87% achieved PASI 75 in UNCOVER1, which proved efficacy. The other two trials demonstrated the sustained maintenance of effect over 60 weeks. The trials were multicenter, randomized, double-blind, placebo-controlled phase 3 studies. An active drug control was also included in the UNCOVER 2 and UNCOVER 3 trials. The primary objective in the UNCOVER-1 trial was to assess whether ixekizumab would be superior to placebo. This was achieved by PASI 75 attainment. A secondary objective of attaining PASI 90 and 100 was also assessed. In UNCOVER 2 AND 3, the 60-week observation yielded safety data in addition to data on efficacy of prolonged use. It was interesting to note that most patients in UNCOVER 3 did attain PASI 90 or 100 by week 60 and maintained it. High rates of persistent remission were observed on randomized withdrawal. The major adverse side effects were headaches, nasopharyngitis and oral candidiasis. A significant proportion developed neutropenia. Eleven patients developed inflammatory bowel disease. Anti-drug antibodies developed in 9% of cases and they reduced the efficacy of the drug. A limitation of this paper is that the details of the arms assigned to etanercept are not properly elucidated.

COMMENTARY IL-17 is one of the latest targets in psoriasis therapy. The molecule first drew interest around 2008. Subsequently, researchers found that this was a key downstream cytokine in targeting psoriasis with drugs such as secukinumab, which is already in use, ixekizumab, and brodalumab. IL-17A and IL-17F are the most important targets. The advantage of all these molecules seems to be their ability to achieve PASI 90 to 100 within a few weeks of starting therapy. The UNCOVER studies examined the role of ixekizumab and defined parameters for using it. In addition to rapid clearance, the drug showed very few side effects except for minor infections. Ixekizumab acts at a peripheral downstream level, at the level of the skin immune system rather than at a more central upstream level of immunomodulation, which is why it has strong safety features. The trials have shown that remissions are maintained for prolonged periods of time. Further studies are needed to determine which types of patients respond rapidly and which subsets of psoriasis for which it is most effective. The authors also state that efficacy and safety have been proven for five years of usage but not beyond that as yet. This is understandable as this is a phase-3 study. As of now, the advantage of rapid clearance safely is significant. Low serum IL-17 can cause instability of atherosclerotic plaques, and two deaths were reported due to vascular causes. Overall, however, the drug did not induce significant adverse cardiac effects. Grade 1 neutropenia was seen in ~ 3% patients and 11 patients suffered from inflammatory bowel disease. As the authors rightly concluded, the complete safety profile of the drug will be known in nontrial clinical use over a long period of time. But, as of now, ixekizumab is effective in treating moderate to severe psoriasis. -MR
PSORIASIS
from gene to clinic

8th International Congress
The Queen Elizabeth II Conference Centre, London, UK
Thursday 30th November - Saturday 2nd December 2017

Organised by Conference and Events Services of The British Association of Dermatologists under the auspices of St. John’s Institute of Dermatology, Kings College London and the Dermatology Centre, University of Manchester

Abstract submission deadline: August 1st 2017
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PROGRAMME

The programme will concentrate on key issues relating to psoriasis at both scientific and clinical levels. There will be keynote and invited lecturers present. Plenary sessions will cover the following topics:

- Genetics
- Immunology and immunity
- Co-morbidities and outcome measures
- Targeted therapeutics

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Psoriasis & atopic dermatitis: Two diseases or one spectrum?

Jessica M. Donigan, MD

Contributing writer Dr. Jessica Donigan is a third-year dermatology resident at the University of Utah in Salt Lake City. She earned a bachelor of science degree in environmental science from the University of Redlands in California and received her doctor of medicine degree from the University of Hawaii John A. Burns School of Medicine in Honolulu. Before starting dermatology residency, she completed a one-year clinical research fellowship under the supervision of IPC Board President Dr. Alexa B. Kimball at Massachusetts General Hospital in Boston.

Historically, psoriasis and atopic dermatitis (AD) have been considered to be two separate diseases with different etiologies and pathogenesis. However, as more knowledge is gained regarding genetics and biological pathways, some overlap has been found between the two diseases.

In October 2016, the International Psoriasis Council (IPC) and the International Eczema Council (IEC) presented a symposium exploring this topic during the 25th Congress of the European Academy of Dermatology and Venereology in Vienna. In evaluating the symposium, attendees found the presentations to be educationally valuable in helping to improve their ability to diagnose patients with psoriasis and/or atopic dermatitis, better able to subclassify the disease based on underlying immunophenotype, and able to select treatments based on a patient’s overall health.

Given the enthusiastic response to the symposium, with an audience of more than 400, the IPC and IEC presented a second symposium on the topic during the American Academy of Dermatology annual meeting in Orlando, Florida, in March. This program focused on the epidemiology, genetics, immunopathogenesis, comorbidities, and treatment of psoriasis and atopic dermatitis, highlighting overlap and differences between the two. Experts in both diseases partnered for each presentation.

Epidemiology and natural history

Joining forces to present the epidemiology and natural history of atopic dermatitis and psoriasis, were, respectively, Dr. Jonathan Silverberg, assistant professor of dermatology, preventive medicine and medical social sciences at the Northwestern University Feinberg School of Medicine and director of the Northwestern Medicine Multidisciplinary Eczema Center, and Dr. Junko Takeshita, assistant professor of dermatology and epidemiology at the University of Pennsylvania Perelman School of Medicine.

While there are not great incidence data for either disease, more data exist on prevalence. Atopic dermatitis has a higher prevalence in children, African Americans, females, and residents of urban areas, whereas psoriasis has a higher prevalence in Caucasian adults, although more severe disease is seen in African Americans. The onset of atopic dermatitis tends to be in early childhood, with a subset persisting into adulthood. This is in contrast to psoriasis, in which the onset is typically in young adulthood with lifelong chronicity. Obesity and smoking are risk factors for atopic dermatitis and psoriasis. Although the epidemiology and natural history of atopic dermatitis and psoriasis differ, both conditions have a major impact on quality of life and, thus, proper diagnosis and treatment are imperative.

Atopic dermatitis has a higher prevalence in children, African Americans, females, and residents of urban areas, whereas psoriasis has a higher prevalence in Caucasian adults, although more severe disease is seen in African Americans.
Genetics
IPC Councilor Anne Bowcock, professor and chair in cancer genomics at the Imperial College in London, and Dr. Wilson Liao, director of the Psoriasis and Skin Treatment Center and associate professor of dermatology at the University of California San Francisco (UCSF), discussed the genetics of atopic dermatitis and psoriasis, respectively. Both diseases have a strong genetic component with 75-80% heritability seen in atopic dermatitis and 68% in psoriasis. Using genome-wide association studies (GWAS), 34 genetic loci have been identified for atopic dermatitis and 64 for psoriasis. Both diseases have a signature gene; loss of function mutations in filaggrin are found in 42% of atopic dermatitis patients, and HLA-C*06:02 mutations lead to a 4-fold increased risk of developing psoriasis.

Barrier dysfunction may play a role in both diseases. In atopic dermatitis, barrier dysfunction may result from filaggrin mutations, while in psoriasis, it may occur as a result of deletion of the late cornified envelope (LCE) 3B and 3C genes. Both atopic dermatitis and psoriasis have human leukocyte antigen (HLA) associations, although the HLA-DRB1*0701 association with AD is not as strong as the association of HLA-C*06:02 with psoriasis. In a direct genetic comparison, no loci were found that are shared between atopic dermatitis and psoriasis. In fact, there were 8 genes with opposing effects. Although atopic dermatitis and psoriasis are both common skin diseases with genetic factors, there are no known common loci.

Immunopathogenesis
Discussing the immunopathogenesis of atopic dermatitis and psoriasis were, respectively, Dr. Emma Guttman-Yassky, director of the Center for Excellence in Eczema and the Laboratory of Inflammatory Skin Diseases, and vice chair and professor of dermatology at the Icahn School of Medicine at Mount Sinai, and Dr. Frank Nestle, global head of immunology and inflammatory research therapeutic area and North America chief scientific officer at Sanofi pharmaceutical company.

T lymphocytic infiltrates are seen in both atopic dermatitis and psoriasis. However, atopic dermatitis is a Th2-driven disease, with activation induced by TSLP and IL-33, resulting in the production of IL-4 and IL-13 with an absent Th17 axis. This is in contrast to psoriasis, in which IL-23-induced activation of Th17/IL-17, and IL-12-induced activation of Th1/IFNγ pathways are involved. These pathways are confirmed by the excellent response of atopic dermatitis to dupilumab, and psoriasis to IL-12/23 and IL-17 inhibitors. Of note, while Asian patients with atopic dermatitis have Th2 profiles similar to those seen in Caucasian patients, increased peripheral and intralesional IL-17 and a more psoriasiform phenotype may be seen. One possible pathway overlapping atopic dermatitis and psoriasis involves Th22 cells and IL-22. While systemic inflammation is well established in psoriasis, atopic dermatitis has recently been shown to have an increased level of systemic T-cell activation when compared to psoriasis. Although the predominant cytokine pathways differ between AD and psoriasis, both are reversible, immune-driven, systemic diseases and systemic treatment should be utilized for patients with moderate to severe disease.

In a direct genetic comparison, no loci were found that are shared between atopic dermatitis and psoriasis. In fact, there were 8 genes with opposing effects. Although atopic dermatitis and psoriasis are both common skin diseases with genetic factors, there are no known common loci.
Comorbidities
Dr. Eric Simpson, head of the clinical studies unit at the Oregon Health & Sciences University, and IPC Councilor Dr. Joel Gelfand, professor of dermatology and epidemiology, vice chair for clinical research and medical director of the clinical studies unit, and director of the psoriasis and phototherapy treatment center at the University of Pennsylvania Perelman School of Medicine, presented the comorbidities of atopic dermatitis and psoriasis, respectively.

As systemic immune-mediated diseases, both atopic dermatitis and psoriasis have significant comorbidities. Conditions associated with psoriasis may be more well known than those with atopic dermatitis, but there is increasing evidence that cardiovascular disease (CVD), infections, and neuropsychiatric disease are comorbidities of atopic dermatitis in addition to the well-established atopic conditions.

As system immune-mediated diseases, both atopic dermatitis and psoriasis have significant comorbidities. Conditions associated with psoriasis may be more well known than those with atopic dermatitis, but there is increasing evidence that cardiovascular disease (CVD), infections, and neuropsychiatric disease are comorbidities of atopic dermatitis in addition to the well-established atopic conditions. Further studies are needed to clarify the association and clinical significance of CVD in atopic dermatitis. Health care practitioners should take the opportunity to ensure that patients with atopic dermatitis and psoriasis are getting routine medical care and should keep comorbidities in mind when choosing therapy. Although more rigorous placebo-controlled randomized clinical trials are necessary, aggressive treatment of atopic dermatitis and psoriasis may improve the risk of future comorbidities.

Treatment
Dr. Thomas Bieber, chair and director of the department of dermatology and allergy at the University of Bonn in Germany, and Dr. Alexa Kimball, IPC board president and professor of dermatology at Harvard Medical School, discussed the therapies for atopic dermatitis and psoriasis, respectively.

As more knowledge is gained about the immunopathogenesis of these diseases, more targeted therapy options are becoming available. Nevertheless, Drs. Bieber and Kimball noted that the classic topical and oral therapies are not outdated and still have utility, especially given their use for a range of disease severities.

Treatments targeting immunopathways can be very effective. Awaiting U.S. Food and Drug Administration approval for the treatment of moderate to severe atopic dermatitis, the drug dupilumab blocks the IL-4 and IL-13 pathways and has been shown to achieve Eczema Area and Severity Index (EASI) 75 in more than 50% of patients at week 16.

The newest biologic agents available for the treatment of psoriasis are the IL-17 inhibitors (secukinumab, ixekizumab, and brodalumab) which have been shown to achieve Psoriasis Area and Severity Index (PASI) 75 response in more than 80% of patients at week 12. Given the increasing number of comorbidities associated with both diseases, an attempt to tailor treatment to comorbidities with a possible goal of prevention should be made.

The classic topical and oral therapies are not outdated and still have utility, especially given their use for a range of disease severities.
Pediatrics: Diagnosis, phenotypes, and translating from adults

IPC Councilors Dr. Amy Paller, professor of dermatology and pediatrics at the Northwestern University Feinberg School of Medicine, and Dr. Kelly Cordoro, associate professor of dermatology and pediatrics at UCSF, discussed atopic dermatitis and psoriasis in the pediatric population. The incidence of pediatric atopic dermatitis and psoriasis are increasing. Both diseases can have different features in children than in adults, including distribution and clinical appearance.

The development of comorbidities can start in childhood, including the atopic march for atopic dermatitis, and obesity, metabolic syndrome, and early CVD in psoriasis (possible “psoriatic march”).

In children younger than 12, psoriasis has a clinical appearance very similar to atopic dermatitis, and, though rare, the two diseases can co-exist. Differences are also seen in the immune pathways. In new-onset pediatric atopic dermatitis, there is significantly higher induction of Th17 cytokines than in adults with the disease. Conversely, in an unpublished study by Dr. Cordoro, decreased expression of IL-17 was seen in pediatric psoriasis.

The development of comorbidities can start in childhood, including the atopic march for atopic dermatitis, and obesity, metabolic syndrome, and early CVD in psoriasis (possible “psoriatic march”). There are several therapy options common to pediatric atopic dermatitis and psoriasis, and there are new medications that may be effective for both based on the pathogenesis the two diseases share. These include the phosphodiesterase (PDE) 4 inhibitors, the drugs crisaborole and apremilast, and the janus kinase (JAK) inhibitors. Noteworthy is the recent approval of etanercept for pediatric patients with psoriasis in the United States. (In Europe, etanercept, adalimumab and ustekinumab are all approved for pediatric psoriasis.)

As our understanding of crisaborole and psoriasis increases in both adults and adolescents, pediatric patients should be treated appropriately with the potential to prevent the atopic and psoriatic marches.

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References


IPC symposium explores individualizing treatments in psoriasis

Jessica M. Donigan, MD

According to two recent physician surveys, unmet educational needs exist among healthcare professionals regarding the treatment of psoriasis and psoriatic arthritis, resulting in underdiagnoses and suboptimal treatment.

The 2014 Multinational Assessment of Psoriasis and Psoriatic Arthritis (MAPP) survey of 800 physicians found that patients with these diseases are frequently undertreated or not treated at all. In the 2016 Global Medical Education Interest multinational survey conducted by the IPC, respondents said they wanted to learn more about treating and managing both diseases.

Based on these and other educational interests of practitioners treating these psoriasis and psoriatic arthritis, IPC organized a Continuing Medical Education-accredited symposium during the annual meeting of the American Academy of Dermatology in Orlando, Florida, in March, to discuss individualizing psoriasis treatment based on patient needs.

Psoriasis comorbidities

Serving as the symposium chair, Dr. Alan Menter, chief of dermatology and director of the Psoriasis Research Institute at Baylor University, discussed the comorbidities of psoriasis, focusing on psoriatic arthritis and cardiovascular disease (CVD).

• Psoriatic arthritis Dermatologists need to pay close attention to joint symptoms as, on average, joint disease develops 5-10 years after skin disease, and choosing the appropriate treatment can prevent destructive arthritis. Although nail disease was once thought to be an indicator of joint disease, this association has not been shown to be statistically significant unless distal interphalangeal (DIP) involvement affects the nail matrix. Enthesitis, on the other hand, is a hallmark of psoriatic arthritis. Patients should be asked about morning stiffness, and evaluation of the fingers, hands, toes, and feet should be performed at every clinic visit. Early referral to rheumatology should be considered.

• Cardiovascular disease The association between CVD and psoriasis is a major topic of current research. Inflammation, T-cell activation, and antibody production play a role in the development of CVD. Th1, Th17, and their resultant cytokines have been found in atherosclerotic plaques. These inflammatory pathways also play a role in coronary plaque disruption and thrombosis. Psoriasis has been shown to be an independent risk factor for myocardial infarction.

Patients on tumor necrosis factor-α (TNF-α) inhibitors may have fewer cardiovascular events than those on other agents, such as methotrexate. However, these improvements have not been consistent across all studies, with no significant difference seen in vascular inflammation between patients on TNF-α inhibitors and those on placebo. The relationship between CVD and psoriasis and the effect of psoriasis treatments on CVD remain important questions that ongoing studies are attempting to answer.

Lifestyle management

Christine Bundy, professor of behavioral medicine at the University of Manchester in the United Kingdom, focused on lifestyle management in patients with psoriasis. Although psoriasis is a chronic condition, few health professionals develop long-term management plans. Patients also often have unrealistic expectations, and may not understand that there is no cure for psoriasis. Anxiety, depression, and suicidality are prevalent in patients living with this disease. Given stigma and social rejection associated with psoriasis, relationships may be difficult for patients with the disease. Many of the behavioral risk factors for psoriasis, such as smoking, obesity, and alcohol abuse, are coping responses to the demand that psoriasis places on patients.

These are also risk factors for CVD. Modifying these behavioral responses may therefore be beneficial to both skin disease and CVD. Professor Bundy encouraged practitioners to speak to patients about mood and to offer ongoing support for lifestyle modifications. She suggested motivational interviewing, a collaborative conversation.
that elicits and strengthens patients’ ability to self-manage and make lifestyle behavioral changes. While motivational interviewing should be delivered by trained individuals, Professor Bundy offered a quick five-question intervention that can be done in every practice:

• What do you understand about your psoriasis?

• On a scale of 1-10, how much do you think your psoriasis is controllable by you/by your treatment?

• On a scale of 1-10, how much does having psoriasis make you feel anxious, worried, or down?

• What one thing do you want to change the most?

• What can you do to achieve that goal and how can I help?

Although not in the repertoire of many dermatologists, lifestyle management should be a component of every therapy plan for patients with psoriasis.

Economics of psoriasis management
Psoriasis is a lifelong disease that is expensive to treat. In this session, Dr. April Armstrong, associate dean, and vice chair and associate professor of dermatology at the University of Southern California Keck School of Medicine, compared the costs associated with a generic versus individualized treatment approach.

Inflammatory conditions often have a generic treatment approach, in which all patients are started on one therapy first, before stepping up to another therapy in the event of failure. Step therapy is often required by insurance payers and structured to move from the cheapest to most expensive therapy.

This is based on the actual drug cost, which is only a small piece of the overall cost of psoriasis. Comprehensive costs include direct costs (eg, office visits, medications, lab tests), indirect costs (opportunity costs, such as inability to work), and intangible costs (eg, poor self-image).9

To examine the costs associated with an individualized management approach, Dr. Armstrong looked at the wholesale acquisition costs of medications obtained from the Red Book drug pricing guide and study data of different medications. The incremental cost per responder can be calculated by the product of the number needed to treat (NNT) and the difference between the cost of the treatment of interest and the cost of the control [NNT x (cost of treatment – cost of control)]. Ixekizumab has the lowest NNT and apremilast the highest. For one year of therapy, infliximab is the cheapest and etanercept is the most expensive.10

Professor Bundy suggested motivational interviewing, a collaborative conversation that elicits and strengthens patients’ ability to self-manage and make lifestyle behavioral changes.

However, similar to step therapy, this method only takes into consideration prescription cost, which is a small piece of the overall cost. While it is not easy to calculate the true costs of generic versus individualized management approaches, starting patients on the medication that has a prompt effect without major adverse events is the ultimate goal.

Note: This activity was planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the A. Webb Roberts Center for Continuing Medical Education of Baylor Scott & White Health and the International Psoriasis Council. The A. Webb Roberts Center for Continuing Medical Education of Baylor Scott & White Health is accredited by the ACCME to provide continuing medical education for physicians.

The A. Webb Roberts Center for Continuing Medical Education of Baylor Scott & White Health designated this live activity for a maximum of 2.0 AMA PRA Category 1 Credit(s).™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.
FOCUS ON PSORIASIS: IPC AT THE 75TH ANNUAL MEETING OF THE AMERICAN ACADEMY OF DERMATOLOGY

References


Online report: 2017 Annual Meeting American Academy of Dermatology

Did you miss the AAD annual meeting? The pathogenesis, comorbidities, and management of psoriasis were all topics of discussion. Read our report for summaries of significant psoriasis-related sessions presented at the meeting by many of our IPC councilors. Sessions included “what a dermatologist needs to know about comorbidities, a psoriasis symposium focused on comorbidities, treating pregnant patients who have psoriasis, and biosimilars. Additional discussions were held on research gaps in psoriasis and new outcome measures for clinical trials, biologic therapy, comorbidities, genetics, and biosimilars. And finally, the promise and perils of biologics was discussed. You can read the full report at bit.ly/2aad17.
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**Faculty:**
- **Course Director:** Alan Menter, MD, USA
- April Armstrong, MD, MPH, USA
- Christine Bundy, PhD, C Psychol AFBPS, UK
- Claudia de la Cruz, MD, Chile
- Peter van de Kerkhof, MD, The Netherlands
- Mark Lebwohl, MD, USA

**September 15, 2017 | 5:00 - 6:30 pm**

**Advances in Psoriasis: A Focus on Emerging Therapies and Approaches to Treatment**

European Academy of Dermatology and Venereology Congress | Geneva, Switzerland

**TOPICS:**
- Patient behavioral factors
- Comorbidities and complications
- Treatment approaches based on individualized patient needs
- Newer therapies available for treatment of psoriasis

These programs are provided through the joint providership of the A. Webb Roberts Center for Continuing Medical Education of Baylor Scott & White Health and the International Psoriasis Council.

These activities are supported by educational grants from Janssen Scientific Affairs, LLC, Lilly and Sun Pharma.

Learn more at [www.psoriasiscouncil.org](http://www.psoriasiscouncil.org)
IPC symposium focuses on research advances

By Megan Noe, MD, MPH

Megan Noe, MD, MPH, is a clinical instructor and post-doctoral research fellow in the University of Pennsylvania dermatology department. Dr. Noe graduated with research honors from Tufts University School of Medicine, earning both a medical degree and a master’s degree in public health, and then completed her dermatology residency at the University of Iowa.

Research advances in the immunology and epidemiology of psoriasis were the focus of a symposium sponsored by IPC during the Society for Investigative Dermatology Annual Meeting held in Portland, Oregon, in April. The symposium was organized and chaired by IPC Councilors Dr. Johann Gudjonsson, University of Michigan, and Dr. Andrew Blauvelt, Oregon Medical Research Center, who helped bring together clinicians and researchers from around the country. Five investigators made presentations, which are summarized below.

- Interleukin (IL)-17 is an important cytokine that drives inflammatory signaling in psoriasis and is the target for several newer biologic agents. Beatrice Dyring-Andersen, MD, PhD, Brigham and Women’s Hospital, presented her research investigating the relative contribution of neutrophils to total IL-17 production in the skin of psoriasis plaques. Using immunostaining of human psoriatic lesions and normal skin, she found that neutrophils may be an important source of IL-17A production in the skin. In a separate experiment, neutrophils cultured with keratinocytes show increased activation compared to neutrophils cultured alone, and production of IL-17A, IL-17F, and IL-22 was upregulated in those neutrophils cultured with keratinocytes. These results suggest that neutrophils may be an important source of inflammatory cytokines in psoriasis.

- Sylviane Lambert, PhD, University of Michigan, also focused her research on IL-17. Her work examined the role of an SNP (single nucleotide polymorphism) variant (D10N) in the TRAF3IP2 gene on IL-17 signaling. TRAF3IP2 has been previously identified as a genetic susceptibility locus that encodes for the protein Act1. Act1 binds to the IL-17 receptor and activates transcription factors through the MAPK and NFKB pathways, promoting a pro-inflammatory state. She isolated keratinocytes and fibroblasts from individuals carrying the wild type variant (protective) and those with the psoriasis-associated SNP variant D10N. They found that the D10N variant was associated with a significant increase in TRAF3IP2 expression in keratinocytes, but not in fibroblasts. The presence of the SNP variant, D10N, led to increased IL-17A production following polyclonal stimulation, consistent with the evidence that D10N is a genetic susceptibility locus associated with an increased risk for psoriasis.

- In addition to TRAF3IP2, genome-wide association studies (GWAS) have identified many genetic susceptibility loci for psoriasis. It is not well understood, however, how each locus contributes to the overall risk of psoriasis. Zhaolin Zhang, PhD, also from the University of Michigan, discussed her research identifying ways to study changes in the chromatin landscape and gene regulatory mechanisms related to psoriasis immune cells, specifically CD4 and CD8 skin homing T cells. This work may provide better understanding of how genetic variation affects the development of psoriasis. She isolated skin homing T cells from peripheral blood to assay the chromatin landscape around known psoriasis susceptibility loci using ATAC-seq (Assay for Transposase-Accessible Chromatin and Sequencing). This research confirms that ATAC-seq can be used to characterize the chromatin landscape of skin-homing T-cells, and future research will be focused on defining these changes in CD4 and CD8 T cells found in psoriasis lesions.

- Previously, epidemiology research has shown that individuals with psoriasis are at an increased risk for many medical comorbidities. Megan Noe, MD, MPH, at the University of Pennsylvania, examined the risk of...
Advancing Knowledge | Enhancing Care

mortality in psoriasis patients compared with population-based controls in a medical records database from the United Kingdom. Previous mortality research had used “treatments received” as a proxy for severity, which may not adequately capture the risk of mortality in all individuals. In this study, Dr. Noe used a prospective cohort of patients with a physician-confirmed diagnosis of psoriasis and physician-reported measures of psoriasis severity. Using this prospective, population-based cohort of patients with psoriasis and controls, she concluded that patients with >10% psoriasis BSA had an increased risk of death, compared to age and sex-matched controls. This increased risk was maintained even after controlling for baseline health status, suggesting underlying comorbidities are not completely responsible for the increased risk of death. These results suggest that preventive health efforts should be targeted toward patients with psoriasis whose BSA is >10%.

• An increased incidence in comorbidities was also seen in children with psoriasis. Megha Tollefson, MD, from the Mayo Clinic, presented her research examining the relationship between psoriasis, obesity, and other comorbidities. Using medical claims data from the US, she found that children with psoriasis were more likely to develop hyperlipidemia, hypertension, metabolic syndrome, polycystic ovary disease, diabetes, non-alcoholic liver disease, and elevated liver enzymes than children without psoriasis. Importantly, children with psoriasis are at an increased risk of developing these comorbidities, regardless of their obesity status, so psoriasis is an independent risk factor for the development of co-morbidities. These results suggest that all children with psoriasis, regardless of their weight, should be monitored for the development of other medical conditions.

In conclusion, the IPC symposium at the Society for Investigative Dermatology meeting highlighted recent advances in psoriasis research from immunology to genetics to co-morbidities. Continued collaborative research will help researchers and clinicians better understand the complex pathophysiology of psoriasis, develop new treatments, and improve the overall care of patients with psoriasis.

Children with psoriasis are at an increased risk of developing comorbidities that include hyperlipidemia, hypertension and metabolic syndrome regardless of their obesity status.
National summit focuses on similarities among autoimmune diseases

Commonalities shared by several immune-mediated inflammatory diseases, including psoriasis and psoriatic arthritis, was the discussion topic at the Interdisciplinary Autoimmune Summit held in New York City in March. IPC Councilor Joel Gelfand, MD, MSCE, of the University of Pennsylvania Perelman School of Medicine, served as co-chair of the summit, which brought together clinical experts from a number of medical specialties who treat patients living with autoimmune diseases. Other conditions addressed were rheumatoid arthritis, spondyloarthritis, Crohn's disease, and colitis.

Presentations highlighted these diseases' similarities and the need for a multidisciplinary approach to diagnosing and treating patients who have inflammatory diseases. Interactive sessions using 3-D technologies reviewed key intracellular pathways underlying disease pathology, as well as innovative targeted therapies that interrupt the inflammation cascade.

In addition, presenters emphasized the contribution of genes, microbiome, and psychosocial stress to the inflammatory process as important drivers in the disease pathways. Several sessions also provided new evidence describing the critical roles of nutrition, exercise, and mindfulness in patient care and well-being. Speakers stressed the need for earlier detection and treatment of immune-mediated diseases, and that management should be tailored to each patient, engaging multiple disciplines.

Serving as co-chairs with Dr. Gelfand were Leonard H. Calabrese, DO, of the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, and Stephen B. Hanauer, MD, Northwestern University Feinberg School of Medicine.

Oral retinoids under review in Europe as part of pregnancy prevention efforts

At the invitation of the European Medicines Agency (EMA), IPC Board Member Professor Peter van de Kerkhof, the Netherlands, attended a consultation meeting to discuss risk minimization strategies for pregnancy prevention. The meeting, organized by EMA’s Pharmacovigilance Risk Assessment Committee (PRAC), was held March 3 in London.

Oral retinoids can cause birth defects in developing embryos and therefore must be avoided in pregnant women. Risk minimization strategies, called pregnancy prevention programmes (PPPs) for certain oral retinoids, have been set up across the European Union. Professor van de Kerkhof was among healthcare professionals and representatives of patient organizations invited to attend the meeting to share views on PPP compliance, improvements, communication approaches between physician and patient, and best measures to monitor the effectiveness of the risk minimization strategies.

For more information on the committee’s review, visit bit.ly/2emaps.
IPC LEADERSHIP

Looking ahead: Q&A with IPC Board President Alexa Boer Kimball

In January, Dr. Alexa Boer Kimball, an IPC board member since 2006, became the organization’s new board president, replacing Professor Chris Griffiths. An eminent clinician, researcher, and health care executive, Dr. Kimball is highly respected in the global psoriasis community and brings wide-ranging expertise to the IPC leadership position.

A dermatology professor at Harvard Medical School, Dr. Kimball serves as president and chief executive officer of Harvard Medical Faculty Physicians at Beth Israel Deaconess Medical Center. Her areas of research include psoriasis and hidradenitis suppurativa. Professor Kimball has received awards for her research on physician workforce economics, quality of life, and outcomes. She has served on multiple nonprofit boards including the Society for Investigative Dermatology and the Hidradenitis Suppurativa Foundation. In 2016, the Women’s Dermatologic Society named her Mentor of the Year and, in 2017, she received the National Psoriasis Foundation’s Outstanding Physician-Clinician Award.

In an interview, Professor Kimball talked about IPC, her role as board president, and how she spends her free time.

IPC has grown in scope and global influence since its inception in 2004. As its new leader, what is your vision for IPC going forward?

We have just completed a 5-year strategic plan that will allow us to continue to build our momentum and achievements in our core areas of education and research and convene groups to exchange knowledge and tackle tough problems. We also plan to improve our communication platforms, including the website, ensure that we are mentoring and fostering early-career physicians who will carry our work forward, and increase our reach to developing countries.

What do you see as the future for psoriasis research and treatments?

We have made incredible progress in our ability to treat the most severe of our patients as well as those affected by substantial moderate disease. But we need to bring our expertise and armamentarium to bear on helping large populations we have not yet reached globally, and in moderate patients. I predict we will see the development of tools that will allow us to match patients and their therapies better, based on biology, preference, and likelihood of success.

What are the main challenges facing IPC?

There are more than 44,000 articles in pubmed.gov referenced under the search term “psoriasis.” Keeping up with the vast knowledge, synthesizing the important information, determining knowledge gaps, and finding compelling ways to keep people’s attention are challenges for any organization. Our unique group of councilors, their commitment and expertise give us the edge in figuring out what is and what will be important and in bringing that information to physicians and patients.

Tell us a little about yourself. What are your hobbies and interests? How do you spend free time?

I enjoy doing just about anything with my family (husband, 2 kids, and a labradoodle), whether it’s watching superhero TV shows or traveling the world. I still manage to get out on the tennis court weekly, and I never quite get to ski enough.
PATIENT CARE

Biosimilars Working Group
A manuscript produced by members of this working group has been submitted for publication, co-chairs Jashin J. Wu and Arnon D. Cohen have announced. The manuscript examines regulatory perspectives and concerns of biosimilars that may impact daily medical practice for dermatologists throughout the world. The group will be submitting a new project proposal to the IPC board of directors for consideration relating to monitoring the safety of biosimilars, as well as their cost and access.

Topical Therapy Working Group
Co-chairs Lars Iversen, Charles Lynde, and Vermén Verallo-Rowell announced that the working group’s manuscript, “Topical treatment of psoriasis: questionnaire results on topical therapy accessibility and influence of body surface area on usage,” has been accepted for publication in the Journal of the European Academy of Dermatology and Venereology. A second manuscript, “Review of international guidelines for the treatment of psoriasis: recommendations for topical corticosteroid use,” is in the final stages of development before submission. The group is also drafting a third manuscript which discusses questionnaire results on the use of topical treatment in specific body sites and for long-term continuous therapy. The working group will be submitting a proposal to the IPC Board to examine the combined use of topical and systemic medications with the intended goal being recommendations for effective combination therapy.

Systemic Therapy Working Group
Caitriona Ryan chaired a robust discussion between IPC councilors and representatives from IPC’s industry partners regarding the definition of patients with moderate psoriasis. The discussion was informed by the results of a 2016 survey, which sought to understand the criteria used worldwide to identify and treat moderate disease. The working group and members of the Patient Care Committee will draft a project proposal that will address the definition of moderate psoriasis and its treatment challenges.

Latin America Working Group
The IPC Latin America Working Group convened during the Reunión Annual de Dermatólogos Latinoamericanos (RADLA) held in Bogotá, Colombia, in May. IPC Councilor Matthias Augustin, University of Hamburg, Germany, led discussions outlining the structure and process of the newly launched Global Psoriasis Atlas. The GPA is a joint project of IPC, the International Federation of Psoriasis Associations (IFPA) and the International League of Dermatological Societies (ILDS) to create a comprehensive global database on psoriasis. IPC councilors will be involved in future epidemiological studies within Latin America to better understand the burden of psoriasis in this region. The working group has also been active in biosimilars-related issues, as many biosimilars are available within Latin America. IPC Directors Claudia de la Cruz, Clínica Dermacross, Santiago, Chile, and Ricardo Romiti, University of São Paulo, Brazil, who served as the meeting’s co-chairs, highlighted the need for further study by the group to ensure the safety of using biosimilars to treat patients with psoriasis.

RESEARCH

IPC studies usefulness of Psoriasis Symptom Inventory
Patient-reported outcome measures are important tools for capturing the patient experience and enhancing the patient-physician interaction. IPC has developed and executed a global study designed to evaluate the practical usefulness of the Psoriasis Symptom Inventory (PSI) in clinical settings. The inventory is a validated, 8-item measure developed to assess the severity of patient-reported psoriasis signs and symptoms.

For the study, patients with psoriasis were asked to fill out a questionnaire asking them about 8 symptoms: itch, redness, scaling, burning, stinging, cracking, flaking and pain. The PSI was tested in 8 clinical settings: Utah, Missouri, and Connecticut in the United States; Quebec, Canada; Manchester, England; Nijmegen, the Netherlands; Porto Alegre, Brazil; and Santiago, Chile.
Findings from this study will inform the dermatology community on the utility of the PSI in global clinical practice settings. Ultimately, understanding patient perspectives of psoriasis symptoms will lead to patient-focused disease management.

IPC Board Member Dr. Bruce Strober, University of Connecticut Health Center, who led the study, presented a poster detailing the research at the American Academy of Dermatology annual meeting in March. The poster is available at http://bit.ly/2s2q15w.

This study was sponsored and funded in conjunction with Amgen. Study results will be presented later in the year.

EDUCATION AND OUTREACH

IPC’s Meet the Experts programs

Chongqing, China

Joining with the Chinese Society of Dermatology and the Chinese Psoriasis Committee, IPC participated in a day-and-a-half International Psoriasis Symposium May 11-12. Panelists discussed psoriasis-related “hot topics” from an international perspective and the status of research in China.

A Meet the Experts program featured a discussion by IPC councilors who described challenging cases they had encountered in their clinical practices. The panelists were Chris Griffiths, IPC immediate past president, University of Manchester, United Kingdom; April Armstrong, University of Southern California, United States; Georg Stingl, University of Vienna, Austria; and Siew Eng Choon, Monash University Malaysia. A free-form discussion of psoriasis issues rounded out the day’s agenda.

Serving on the event’s organizing committee were Professor Griffiths; IPC Councilor Xuejun Zhang, Anhui Medical University, Hefei, China; Min Zheng, Zhejiang University, Hangzhou, China; and Chun-Lei Zhang, Peking University Third Hospital, Beijing.

Of IPC’s participation in the conference, Professor Griffiths said, “As part of IPC’s strategic plan, our mission is to advance the care of people with psoriasis worldwide. This meeting was especially important to us as we reached out to colleagues in China, forging new collaborative links.”

Dr. Zhang, who joined IPC in 2016, called the event a success and expressed hope that “there will be more opportunities for cooperation and exchanges like this in the future.”

As part of its commitment to expand its international presence, IPC will participate in one conference in Asia each year.

Bogotá, Colombia

IPC Councilor Fernando Valenzuela, MD, of the Universidad de Chile, Santiago, moderated this Meet the Experts program, which was part of the Reunión Anual de Dermatólogos Latinoamericanos, or RADLA, (Annual...
Meeting of Latin American Dermatologists) in May. Topics included psoriasis in special populations; differential diagnosis in psoriasis; psoriasis and rheumatoid arthritis, alopecia and human papilloma virus; and a case study of a patient with secondary loss of response to adalimumab. Panelists were IPC Councilors Richard Langley, MD, Dalhousie University, Halifax, Canada; André Vicente Esteves de Carvalho, MD, PhD; Nancy Podoswa, MD, Instituto Mexicano del Seguridad Social, Mexico City, Mexico; Angela Londoño, MD, Universidad CES, Medellín, Colombia; and César González, MD, Clínica Colombia, Bogotá. Other presenters included Irmandade Santa Casa de Misericórdia de Porto Alegre e Hospital Moinhos de Vento, Porto Alegre, Brazil; José Manuel Carrascosa, MD, Hospital Universitari Germans Trias i Pujol, Barcelona, Spain; and Irene Araya, MD, Hospital Clínico Universidad de Chile, Santiago.

NEWSMAKERS

Congratulations to these IPC board members and councilors for their notable achievements

Jonathan Barker, IPC vice president/president-elect and chair of IPC’s scientific committee, delivered the distinguished Eugene M. Farber Endowment Lecture at the Society of Investigative Dermatology’s annual meeting in Portland, Oregon, in April. The annual lecture is presented by an investigator whose work helps expand insights into the pathophysiology and treatment of psoriasis. Dr. Barker is professor of medical dermatology and department academic head at St John’s Institute of Dermatology, King’s College London. He is co-director of the institute’s Skin Therapy Research Unit and the Psoriasis Service. He is a key investigator in the effort to map psoriasis susceptibility genes and heads IPC’s exome genetics project. He was introduced by last year’s lecturer, IPC Councilor Nicole Ward.

André Vicente Esteves de Carvalho, MD, of the Santa Casa de Misericórdia de Porto Alegre, Brazil, received his PhD in pathology from the Universidade Federal de Ciências da Saúde de Porto Alegre. The title of his thesis is “Eficácia das medicações imunobiológicas e inibidores de pequenas moléculas na psoriase: uma revisão sistemática e metanálise de ensaios clínicos randomizados” (“Efficacy of immunobiologic and small molecule inhibitors drugs for psoriasis: a systematic review and meta-analysis of randomized clinical trials”).
César Gonzalez, MD, of the Clínica Colombia in Bogotá, has been named president of the Reunión Anual de Dermatólogos Latinoamericanos, or RADLA (Annual Meeting of Latin American Dermatologists), Latin America’s premier dermatology conference. Dr. Gonzalez served as co-chair of the 35th RADLA held in May in Bogotá. An IPC councilor since 2015, Dr. Gonzalez is recognized for his psoriasis research and participates as a speaker at numerous international conferences in dermatology, rheumatology, and internal medicine. In 2010, he received the national award for research in the XXVII and XXVIII National Congresssof Dermatology and Dermatologic Surgery, respectively.

Alexa Boer Kimball, MD, MPH, IPC’s new board president, and Joel Gelfand, MD, MSCE, received the National Psoriasis Foundation’s 2nd annual Medical Professional Award for “their tireless work and commitment to better patient outcomes and promoting a cure for psoriasis and psoriatic arthritis.” The award is given to clinicians who have made a significant impact in the psoriatic disease community and work with NPF toward finding a cure and improving lives. Recipients were nominated by patients and colleagues.

- Dr. Kimball began her 3-year term as IPC board president in January. She has received a number of honors this year in addition to this NPF award. Read about her and her vision for IPC on page 23.

- Dr. Gelfand is professor of dermatology and epidemiology at the University of Pennsylvania Perelman School of Medicine. His clinical work focuses on general dermatology and psoriasis. He has created a multidisciplinary approach to the care of psoriasis patients at the university in mentoring a rheumatologist and a cardiologist who now specialize in the systemic complications of psoriasis. Other awards Dr. Gelfand has received include the Marjorie Bowman Penn Medicine Award for excellence in patient-oriented research and the American Skin Association's Achievement Award for psoriasis research.

Amy Paller, MS, MD, has received the Society of Investigative Dermatology’s highest award, the Stephen Rothman Memorial Award, presented annually for distinguished service to investigative cutaneous medicine. Dr. Paller is the Walter J. Hamlin professor and chair and professor of pediatrics at Northwestern University’s Feinberg School of Medicine. She directs Northwestern’s Pediatric Dermatology Clinical Trials Unit, is a pioneer in discovery related to diagnosis and therapy of genetic skin disorders, and has been lead investigator on several landmark papers related to inflammatory skin disease. Among numerous awards she has received are the American Academy of Dermatology’s Clarence S. Livingood, MD, Memorial Award and the Women’s Dermatological Society’s Rose Hirschler Award.

Nicole Ward, PhD, has been elected to a 6-year term as secretary-treasurer of the Society for Investigative Dermatology. She is the first-ever non-MD and only the second woman since 1938 to hold the position. Her duties include helping to execute the vision and promote the society’s mission as well as maintain its financial health. Dr. Ward is an associate professor of dermatology and director of the Morphology Core of the Skin Diseases Research Center at Case Western Reserve University and University Hospitals Cleveland Medical Center. Her work focuses on three research areas: skin inflammation drives remote vascular inflammation and thrombosis; the neural activation of skin inflammation and proliferation; and elucidating a role for IL-17c and IL-17RE signaling in psoriasis pathogenesis.
NEW IPC COUNCILORS

Kelly M. Cordoro, MD
San Francisco, California, USA
Dr. Cordoro is an associate professor of dermatology and pediatrics at the University of California, San Francisco. She is assistant division chief and director of the pediatric dermatology fellowship at UCSF. She received her doctor of medicine degree from Pennsylvania State University College of Medicine and completed her dermatology residency at the University of Virginia and a pediatric dermatology fellowship at UCSF. Her clinical focus is complex medical dermatology, particularly inflammatory diseases, in children. Her primary research interest is pediatric psoriasis, for which she earned a prestigious Dermatology Foundation Career Development award. A founding member of the Pediatric Dermatology Research Alliance (PeDRA), she serves as co-chair of PeDRA’s Psoriasis Investigator Group. She chairs several psoriasis-related American Academy of Dermatology (AAD) educational working groups and belongs to the leadership development steering committee. Dr. Cordoro is assistant editor for pediatric dermatology for the Journal of the American Academy of Dermatology, a member of the editorial board of Pediatric Dermatology, and the dermatology content editor for the New England Journal of Medicine Knowledge Plus Program.

Siew Eng Choon, MBBS, MRCP, FRCP
Johor Bahru, Malaysia
Dr. Choon is a senior consultant dermatologist at Hospital Sultanah Aminah and a clinical associate professor for the School of Medicine and Health Sciences at Monash University. She received her medical degree from the University of Malaya and undertook postgraduate training in general medicine. She obtained membership in the Royal College of Physicians (London, UK) and was subsequently elected as a fellow. She has authored or co-authored more than 60 articles and contributed chapters to a dermatology textbook and other publications.

Robert E. Kalb, MD
Buffalo, New York, USA
Dr. Kalb is a clinical dermatology professor at the State University of New York at Buffalo School of Medicine and Biomedical Sciences. He also is an adjunct dermatology professor at the Perelman School of Medicine at the University of Pennsylvania in Philadelphia. He has extensive experience in psoriasis research and treatment, and has presented numerous lectures at local, national, and international meetings. He also conducts clinical trials of new psoriasis treatments. Dr. Kalb has been in private practice with the Buffalo Medical Group’s dermatology department since 1989 and coordinates the group’s phototherapy department, which is Western New York’s principal center for psoriasis treatment. Dr. Kalb obtained his doctor of medicine degree cum laude from Downstate Health Science Center in Brooklyn and completed his medical internship at Cornell University/North Shore University Hospital. He received his dermatology training at the College of Physicians and Surgeons at Columbia University in New York. The author of 60 publications, Dr. Kalb is a member of the American Academy of Dermatology, the Master’s Dermatology Society, and the Buffalo Rochester Dermatology Society.
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LOOK WHO’S READING THE PSORIASIS REVIEW

IPC Councilors Johann Gudjonsson, University of Michigan, United States, at left, and Andrew Blauvelt, Oregon Medical Research Center, United States, take time to peruse the IPC Psoriasis Review after serving as co-chairs of IPC’s symposium, “Scientific and Clinical Advances in Psoriasis: 2017 and Beyond” at the Society of Investigative Dermatology Annual Meeting in Portland, Oregon, in April. And in Chongqing, China, IPC Councilor Xuejun Zhang, Anhui Medical University, Hefei, stops by the IPC exhibit table for his copy of the Review. Dr. Zhang (below) helped organize IPC’s Meet the Experts program held during the National Annual Conference of Chinese Society of Dermatology in May.

ACKNOWLEDGMENTS

IPC gratefully acknowledges Co-editors Professor Dr. Elke M.G.J. de Jong, Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands, and Murlidhar Rajagopalan, MD, Apollo Hospitals, Chennai, India, for their writing and editing contributions to the July 2017 IPC Psoriasis Review newsletter.

IPC PSORIASIS REVIEW

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RESOURCES

The International Psoriasis Council is pleased to bring you the following educational opportunities and resources to advance your knowledge of treating patients with psoriasis.

UPCOMING IPC EVENTS

August 26, 2017
IPC’s Meet the Experts
South African Dermatological Society Annual Meeting
Pretoria, South Africa

September 15, 2017
IPC CME Symposium: Advances in Psoriasis: A Focus on Emerging Therapies
European Academy of Dermatology and Venereology Congress (EADV)
Geneva, Switzerland

September 29, 2017
IPC presents a Scientific Poster Walk
47th European Society of Dermatological Research (ESDR)
Salzburg, Austria

October 27, 2017
IPC’s Meet the Experts
SharmDerma Congress
Cairo, Egypt

November 30-December 2, 2017
Psoriasis: From Gene to Clinic
8th International Congress
London, England

IPC ONLINE RESOURCES

On-Demand Webcasts
“Individualizing Treatment in Psoriasis: Empowering You and Your Patients to Make Well-Educated Decisions as a Team.”

Continuing Medical Education (CME) credits are available for participating in this webcast series.

International Eczema Council (IEC) & IPC joint symposia: “Psoriasis and Atopic Dermatitis: Two Diseases or One Spectrum?” Parts 1 and 2

Webcasts of 2 IPC symposia with world-renowned experts exploring overlaps and differences between the 2 diseases.


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The International Psoriasis Council (IPC) is a dermatology-led, voluntary, global nonprofit organization dedicated to innovation across the full spectrum of psoriasis through research, education and patient care. IPC’s vision is a world free of psoriasis. The mission of the IPC is to advance the care of people with psoriasis worldwide through education, research, and advocacy.