Lessons Learned from the International Eczema Council (IEC)

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No conflicts of interest other than being inaugural President of IEC (until 1 day ago)
In late 2014, the International Eczema Council (IEC) was founded as a global nonprofit organization led by dermatology experts on atopic dermatitis. Inaugural officers chosen at AAD in 2015 and has expanded thereafter (www.eczemacouncil.org). Governed by a 12-person Board of Directors. Currently 82 Councilors and Associates from 22 countries serve as expert advisors to the IEC.

Need for a Group of Experts on Atopic Dermatitis

- Role model: 10th anniversary of International Psoriasis Council/IPC

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Huge unmet need for better understanding of atopic dermatitis/AD
Growing interest in finding new ways to treat AD, including from pharma
What has the IEC contributed since 2015?
Moving Research Forward

• Networking at major meetings, leading to collaborative research
• Working towards consensus on prioritizing unmet research needs related to AD
• Promoting standardization/validation of Investigator Global Assessment (IGA)
  – FDA requires Primary Endpoint in AD studies of IGA clear or almost clear with at least a 2 point improvement in IGA
  – In past, different IGA for each study, all without validation
    • All required new investment of time and funding to develop
    • Lack of uniformity in measure
  – New IGA (vIGA™)* validated by efforts of 24 AD (primarily IEC) experts from US, Europe and Japan; reviewed by several major pharmaceutical companies
  – Available for use free via link at IEC website (www.eczemacouncil.org)

*thanks to Eli Lilly and Company for spearheading
Development of Draft Guidance for Industry on New Therapeutic Agents for Atopic Dermatitis (AD) in Children and Adolescents

- Literature-based, consensus recommendations for the conduct of clinical trials of systemic and topical agents
- Comprehensive, including: endpoints, duration, patient population, ethics, safety, drug product, randomization, monitoring, statistical and regulatory considerations
- Focusing on pediatric and patient-centered principles

Siegfried et al. Pediatric Dermatol 2017 (submitted for publication)
Educational meetings

• **2016 EADV**: Joint sessions with IPC focused on differences and similarities between AD and Psoriasis (posted on website)
• **2016 ISDS**: Focus on Therapeutics with AD patient participation
• **2017 AAD**: Repeat performance of Joint IEC/ IPC by popular demand - with different speakers
• **2017 SID**: The Precise Control of Skin Barrier Homeostasis
• **2017 EADV**: Pruritus, Neuroinflammation and Therapeutic Strategies
• **2017 ESDR**: The Role of Environmental Factors in AD
• **2017 JSID**: Personalized Medicine and AD
• **2018 AAD**: The Microbiome and Atopic Dermatitis
• **2018 IID**: Phenotype-Genotype Correlations and Personalized Medicine in Atopic Dermatitis
Educational meetings

- 2018 AAD: The Microbiome and Atopic Dermatitis – pre-AAD on Thurs am

  Introduction and IEC Councilor survey  Amy Paller
  Overview of Staphylococcus and AD  Alan Irvine
  What is the human skin microbiome?  Heidi Kong
  Long-term consequences of early life microbiome interactions  Patrick Seed
  Host-microbiome dialogue at the cutaneous interface  Shruti Naik
  Immune tolerance to commensal skin bacteria: timing is everything  Tiffany Scharschmidt
  Skin microbiome studies in eczematous dermatitis  Heidi Kong
  Skin bacterio-therapy: Can we cure atopic dermatitis with the microbiome?  Richard Gallo

Closing Comments  Thomas Luger
Educating Physicians and the Public

- Every year Councilors and Associates choose Top 10 publications in AD (www.eczemacouncil.org) – 2017 selections to be posted on website in April


Educating Physicians and the Public

• Publications based on the collective experience of AD experts
  • Comorbidities and AD as a systemic disease (Brunner et al. JID 2017;137:18-25)
  • What’s in a name? Atopic dermatitis or atopic eczema, but not eczema alone. (Silverberg et al. Allergy 2017 Dec; 72:2026-30)
  • When does atopic dermatitis warrant systemic therapy? Recommendations from an expert panel of the International Eczema Council. (Simpson et al. JAAD 2017 Oct; 77:623-33)
  • Use of systemic corticosteroids for atopic dermatitis: International Eczema Council consensus statement. (Drucker et al, Br J Dermatol. 2017 Sep 2; Epub ahead of print)
• Others in progress or submitted
  – Clinical trial design and placebo responses
  – The value of anti-staphylococcal approaches
  – Human models of AD
AD and Comorbidities

• AD association with allergic disorders
  – Heterogeneous order of development of other disorders, not always “atopic march”
  – Later development of hand eczema or allergic contact dermatitis could be considered the delayed “atopic march”
  – Importance of the barrier impairment in development of allergic comorbidities
    • Reminder that emollients are more than barrier substitutes
      – Petrolatum increases expression of barrier proteins and antimicrobial peptides and suppresses expression of pro-inflammatory cytokines
• Association with staphylococcal and viral infections and neuropsychiatric abnormalities, including ADHD
• Controversial but growing evidence of associations with cardiovascular disease, autoimmunity, and certain cancers
  Brunner et al. JID 2017;137:18-25
Words are Important: What’s in a name?
What’s in a name?

• Variable use of term Atopic dermatitis vs Atopic eczema vs Eczema
• In literature, 64% used AD; 47% eczema and 7% AE with regional preference (Europeans used more “eczema” than N. Americans)
• “Eczema” refers to entire group of eczematous disorders and is thus imprecise, but is the term recognized by the public
  • “National Eczema Association” and “International Eczema Council”
• Varied nomenclature is deleterious
  • Leads to confusion
  • ICD codes are different
    • ICD-9: 691.8 vs 692.2
    • ICD-10: L20.x vs L30.9...figuring out which 20.x code remains an issue
  • Incorrect use of ICD codes can affect reimbursement for services and medications for patients and prevents accurate assessments in epidemiologic studies

Silverberg et al. Allergy 2017; 72:2026
What’s in a name?

• 77 Counselors and Associates from 20 countries (92%) responded
• Stringent consensus achieved (97%) that the prefix “atopic” must be used when referring to condition
  – Only 15% thought use of the term “eczema” was acceptable
• Considered that either AD (89%) or AE (77%) was acceptable
• Disagreement re preferred
  – 58% preferred AD
  – 43% preferred AD
• In counseling with patients, introduce “atopic” prefix and name “atopic dermatitis” when discussing “eczema” as proper name
• Use “AD” or “AE” in presentations and publications

Silverberg et al. Allergy 2017; 72:2026
When is systemic therapy for AD warranted?

• Need for guidelines for decision-making about advancing to systemic therapy
• 29 IEC Councilors probed the literature and provided expert opinion
• Make sure patient has had a trial of intensive topical therapy (medium-potent topical steroid for 1-4 wks followed by proactive therapy as maintenance)
  • Add in wet wraps/ soak and seal as possible
• Ensure that adequate education has been provided to optimize adherence to prescribed regimen
  • Address steroid/ TCI phobia and assess patient preferences
  • Written instructions, kept as simple as possible
• Consider alternative or concomitant diagnoses before advancing, esp. infection and allergic disorders (contact dermatitis; therapy for allergic rhinitis or asthma)

Simpson et al. JAAD 2017; 77:623
When is systemic therapy for AD warranted?

• Severity-based assessment scores alone are insufficient for decision-making
  • Decisions on severity are best made with serial assessments, not a static one
• Must take into consideration patient’s quality of life
  • E.g., hand involvement may impact daily living and facial AD may affect emotional and social functioning
  • If not using scales, ask open-ended questions about effect on home/school/work and consider numerical ratings for itch/sleep/pain

• Before advancing, consider if phototherapy is feasible
• Choice of systemic therapy depends on age, patient’s experience with previous medications, patient preference (oral vs injection), comorbidities (e.g., alcohol abuse, renal or liver disease), and childbearing potential/family planning

Simpson et al. JAAD 2017; 77:623
When is use of systemic steroids for AD acceptable?

- Dearth of high quality published evidence
- Widespread use of systemic steroids for AD
  - 36% of adults with mod-severe AD in phase 2b dupilumab trial had been treated with systemic steroids in previous year
  - In TREAT adult survey (UK), 42% list systemic steroids as first-line for AD
  - In TREAT pediatric survey, 31% of European and 5% of N. American pediatric dermatologists ranked systemic steroids as a first-line treatment for children with AD
- Rebound with stopping and side effects: Issues with use of systemic steroids for AD
  - 52% of adults patients in a clinical trial of CsA vs prednisolone experienced rebound flare when discontinuing the steroid
  - Increased rates of sepsis, fractures and venous thromboembolism in adults, even within 30 days of starting treatment
  - Increases in infections, growth delay and obesity in children given steroids for more than 2 weeks

Drucker et al. Br J Dermatol. 2017 Sep 2; Epub ahead of print
When is use of systemic steroids for AD acceptable?

- Participation by 78% of IEC Councilors with consensus reached if ≤30% disagreed or strongly disagreed; 12 items achieved consensus
- Assessed separately for adults vs children 12 and over vs. children under 12 years
- For adults, systemic steroid use should generally be avoided (78% neutral to strongly agreed) or used rarely (80%) for treatment of severe AD and when no other viable treatment options (81%)
- For children 12-17 years, steroids should generally be avoided (84%) or used rarely (71%)
- For children under 12 years, steroids should generally be avoided (86%) or used rarely (71%)
- 57% said that systemic steroids should never be used in children

Drucker et al. Br J Dermatol. 2017 Sep 2; Epub ahead of print
When is use of systemic steroids for AD acceptable?

- If used, treatment with systemic steroids for severe AD should be limited to short-term use (94%)
  - Used for no more than 2 wks (69%); tapered slowly (60%)

- Systemic steroids may be used for severe AD:
  - When there are no other viable options
  - As a bridge to other systemic agents or phototherapy
  - In an acute flare in need of immediate relief
  - In anticipation of an important life event (eg wedding)
  - In extreme cases such as erythroderma

Drucker et al. Br J Dermatol. 2017 Sep 2; Epub ahead of print
Conclusions

• In just 3 years since its initiation the International Eczema Council has contributed greatly to the Atopic Dermatitis literature and providing education at major meetings

• Research has been moved forward by opportunities for networking, establishing the first validated Investigator Global Assessment, supporting the new Guidance Document for AD, and the series of Councilor meetings which have led to 4 publications to date with several more to come

• The commitment to education of dermatologists and other healthcare personnel has been met through a series of unique didactic sessions at meetings, which bring together the top experts in AD to discuss controversial and cutting-edge topics at all major dermatology meetings

• Keep posted about IEC activities through the website: www.eczemacouncil.org