

Elevate-Derm 2022 | Top Clinical Insights

Session 1: Fundamentals of Immunology in AD | Dr. Alexandra Golant

- Atopic dermatitis is often the first presentation in the atopic march, followed by food allergy, asthma, and rhinitis. There is ongoing research regarding the use of deliberate emollient use early in life in predisposed babies and reducing the risk of progression through the atopic march.
- Clinically normal appearing skin in atopic dermatitis patients still harbors markers of inflammation/inflammatory cytokine expression.
- Consider IgE testing in patients where the diagnosis is not clear (spongiotic/psoriasiform dermatitis on biopsy). If IgE is elevated, guide treatment towards a Th2 directed therapeutic to manage itch.

Session 2: Updated AAD Management Guidelines For Moderate-Severe AD | Dr. Alexandra Golant

- Essential features for atopic dermatitis diagnosis include pruritis, eczema/spongiotic skin disease, and chronic/relapsing history. The atopic dermatitis diagnosis can be made without early age of onset or personal/family history of atopy.
- Consider the long-term implications of uncontrolled systemic inflammation in management of AD patients. Comorbidities associated with AD in adults include alopecia areata, urticaria, asthma, food allergy, rhinitis, depression, anxiety, hypertension, coronary artery disease, peripheral artery disease, obesity, osteoporosis, bone fractures, and skin infection.
- Definition of moderate to severe AD may be considered with 10% or more BSA involvement, individual lesions with moderate to severe features, involvement of highly visible areas or those important for function (neck, face, genitals, palms, soles), or significant impact on quality of life. Severity rating can be expressed with both BSA and IGA to help justify treatment choices.

Session 3: Emerging Topical and Systemic Agents in AD | Dr. Marc Serota

- Atopic dermatitis is a systemic disease with cutaneous manifestations, treat it as such by targeting Th2 mediated inflammation early in the process to address multiple atopic diseases at once.
- Dupilumab approved for both atopic dermatitis and prurigo nodularis, binds to and inhibits IL-4 receptor alpha subunit, therefore interfering with IL-4 and IL-13 cytokine expression. Tralokinumab selectively binds to IL-13 and inhibits IL-13 induced release of pro-inflammatory cytokines, with reduced incidence of conjunctivitis compared to Dupilumab.
- Topical and oral JAK-inhibitors provide quick onset itch relief via inhibition of Th cell differentiation, thus inhibiting the inflammatory cytokine cascade that drives pruritis in atopic dermatitis.
- IL-31 is a key immune cytokine involved in the pathogenesis of neurogenic itch.

Session 4: PRP and Its Uses in Dermatology | Limor Weinberg ARNP, FNP-BC

- PRFM/PRF (Platelet Rich Fibrin Matrix/Platelet Rich Fibrin) advantages over PRP: preservation of more cells such as mesenchymal cells; slower release of growth factors
- PRF promotes faster wound healing and better aesthetic results compared to PRP.
- Patients planning to undergo PRP/PRF/PRFM treatments should avoid use of anti-inflammatory drugs for 2 weeks prior to treatment

Session 5: Panel: Complex Contact Dermatitis/AD Case Management | Dr. Alexandra Golant

- Always complete a full body skin exam for patients with undiagnosed skin rashes to see full picture and help rule out scabies infestation.
- Avoid "anchoring bias." Consider a full list of differential diagnoses even if the patient's previous provider made a diagnosis (if the patient is not improving with appropriate treatment for the previously diagnosed condition).
- Consider patch testing for chronic hand eczema when: it is new onset (> 3 months), acute worsening, and refractory to conservative treatment.

Session 6: Orbital and Periorbital Lesions: Seeing What's There | Dr. Vikram Durairaj

- Characteristics suggesting malignancy on the eyelid: irregular borders, induration, ulceration, loss of lashes.
- Molluscum lesions on the eyelid can cause chronic viral conjunctivitis and should be treated with curettage or excision.
- Syringomas - occur at time of puberty. Eccrine glands in dermis- treated in stages.

Session 7: Panel: Urticaria Workup Panel & Case Discussion | Dr. Alexandra Golant & Dr. Marc Serota

- When to consider alternate diagnoses for chronic urticaria: lack of pruritis, individual lesions that last days to weeks, angioedema without urticaria, lesions only affecting one area of the body, a review of systems suggestive of systemic disease, and/or a failure to respond to therapy.
- Urticarial lesions are itchy and last less than 24 hours.
- Tryptase is useful in distinguishing mastocytosis from mast cell activation (acute allergic reaction vs anaphylaxis).

Session 8: Danger Zones of the Eyelid: How and When To Do an Eyelid Biopsy | Dr. Vikram Durairaj

- Skin of the eyelid is the thinnest skin of the body.
- When is it ok to perform Eyelid bx: non margin involving lesion, no lacrimal system involvement, skin only, minimal closure needed, no punch BX.
- Vertical surgical tension will cause horizontal tension on the eyelid, potentially causing a distortion of the eyelid margin.

Session 9: Non-biologic Systemic Immunosuppressants/Non-Immunosuppressants | Dr. John Koo

- Acitretin has unique utility as it is safe and efficacious for elderly patients, enhances phototherapy, is not an immunosuppressant and is likely anticancer
- Cyclosporin at maximum dermatologic dose of 5 mg/kg per day will clear up almost any psoriasis in 3 months or less. Do not let serum creatinine increase by more than 30% of the baseline. After using daily (uninterrupted) for 2 years the patient must take a break.
- Deucravacitinib, an effective oral therapy, is a TYK-2 inhibitor. It can be used first line with no drug-drug interaction, no dosage adjustment for any degree of renal impairment, with no black box warning.

Session 10: Home Remedies and Consumer Therapies, Impact on Patient Care | Dr. Peter Lio

- Although the evidence for using vitamins to treat acne is sparse, there are several supplements that show promise for Niacinamide 500 mg BID and Pantothenic acid 1000 mg BID
- Topical application of sunflower oil increases synthesis of ceramides and has direct emollient and barrier repair properties.
- Two studies have demonstrated some improvement of psoriasis with fish oil supplementation.

Session 11: Recent, Emerging Therapies for Connective Tissue Disease: Beyond Prednisone | Dr. Gabriela Cobos

- Mycophenolate mofetil has a slow onset requiring a longer trial in sclerosing disorders. If GI distress occurs, switch to mycophenolic acid.
- Therapy for Raynaud's include sildenafil, botulinum toxin, SSRIs, ACEi, ARBs, doxazosin, prazosin, pentoxifylline, topical/oral nitrates, calcium channel blockers (nifedipine>amlodipine) and behavioral modification (thick socks, smoking cessation, decrease/stop caffeine, avoid vasoconstrictors).
- In cutaneous dermatomyositis, don't forget to treat pruritis.

Session 12: High Yield Pearls From the Experts | Dr. Gabriela Cobos & Dr. John Koo

- Cobos - With scleromyxedema always check thyroid, work up for underlying gammopathy and treat with IVIG or thalidomide
- Cobos - Do not give a diagnosis if there is uncertainty.
- Cobos - In higher doses of systemic glucocorticoids each 10mg/d increase was associated with a 3.6% increase in osteonecrosis rate and >20mg/d resulted in higher osteonecrosis incidence.
- Koo - AD is a spectrum disorder, meaning it manifests in many ways. Pause, ask questions, and document atopic disease to leave all therapeutic options available.
- Koo - Psoriasis is a dangerous and deadly disease (cardiac, metabolic, thrombotic, psychosocial comorbidities); therefore, not treating this disease aggressively is a detriment to our patients. Untreated disease is often more dangerous than FDA approved medications.

Session 13: The Gut-Derm Connection: Microbiome Triggers of Autoimmune Disease | Dr. Peter Lio

- Studies have shown that moisturizers can balance the microbiome of the skin.
- Gut dysbiosis (lack of diversity and balance) has been linked to obesity, autoimmunity, infectious disease, and even some cancers.
- Worsening gut permeability (leaky gut) correlates with increasing atopic dermatitis severity.

Session 14: 1:40 vs 1:640 Going Beyond the Basics of Ordering, Interpreting ANA Panels | Dr. Gabriela Cobos

- A 1:40 ANA test is found in 32% in healthy individuals; but the higher the titer, the higher the suspicion of systemic disease.
- Positive ANA tests can be caused by thyroid disease, liver disease, infections, malignancy, pregnancy, and many drugs (esp. TNF inhibitors).
- With chronic cutaneous lupus, need to check renal function, DS-ANA, and complement levels every 6 months.
- Drug -induced lupus usually occurs 6 weeks to several years after initiation of a drug; most often RoANA+; terbinafine most common culprit.

Session 15: Controversies in Integrative Dermatology | Dr. Peter Lio

- Integrative healthcare brings together conventional and complimentary approaches in a coordinated way.
- Current evidence suggests that strict elimination diets and caloric restriction in AD patients does not significantly improve disease.
- Black salve (bloodroot) should be avoided for known malignancies!
- Decreasing obesity improves psoriasis and gut dysbiosis is associated with psoriasis.

Session 16: Psoriatic Disease Updates 2022 | Dr. Kristina Callis Duffin

- Thirty percent of patients who have psoriasis on their skin will develop psoriatic arthritis.
- When a patient isn't responding to highly effective therapies: examine genitals, folds, hands, feet, and scalp, take KOH and/or bacterial cx, patch test, biopsy, take photos, consult other providers.
- Fungal infections in psoriatic nails are common and can be made worse by systemic agents.

Session 17: Vasculitis: Diagnosis and Management | Dr. Robert Micheletti

- The size of the involved vessels helps classify the vasculitis: small vessel involvement: palpable purpura, urticarial papules, vesicles, petechiae vs. medium vessel involvement=livedo reticularis, retiform purpura, ulcers, subcutaneous nodules, digital necrosis.

- To diagnose skin-limited vasculitis, you must first rule out systemic manifestations (renal, joint, GI) and underlying conditions.
- In small vessel vasculitis with a negative review of systems, the most important lab order is a UA with micro because the patient may not have symptoms but could have glomerulonephritis.

Session 18: Panel: Memorable Outpatient Cases From My Career | Dr. Kristina Callis Duffin, Dr. Robert Micheletti & Dr. Lindsay Wilson

- Hydroxychloroquine is associated with (AGEP) acute generalized exanthematous pustulosis, plaque psoriasis (new and worsening) and pustular psoriasis (new and worsening).
- If a diagnosis of scurvy is suspected, it is safe and recommended to start supplementation with vitamin C even while waiting for diagnosis confirmation.
- Paraneoplastic pemphigus is often due to an underlying neoplasm (non-Hodgkin's lymphoma, Castleman's, CLL, thymoma, sarcoma, melanoma, or epithelial CA).

Session 19: Dermatologic Urgencies & Emergencies | Dr. Robert Micheletti

- Medications are the most common cause of SJS/TEN (typically within 1-3 weeks of taking the medication and could be a drug that is already discontinued).
- DRESS syndrome: facial erythema and swelling hallmark feature: unlike SJS culprit med can be longer duration of therapy (2 weeks to 2 months)
- Anti MDA-5 Dermato: ulcerated Gottron's papules; painful palmar papules, pernio- like lesion on digits; poor prognosis-rapidly progressive interstitial lung disease
- PG: rapidly progressive, painful ulcer, prednisone responsive, exhibits pathergy

Session 20: Women's Health In Dermatology | Dr. Lindsay Wilson

- Hidradenitis Suppurativa: strong correlation with Metabolic Syndrome, Obesity thus Metformin can be considered as adjunctive therapy. Dose intensification with Adalimumab to 80mg weekly can be helpful for pts who initially improved with standard Adalimumab but have diminishing response. Care of HS patients should include screening for comorbidities such as IBD, Inflammatory arthritis.
- Pregnant/Lactating patients: If using biologics throughout entire pregnancy, infant immunization scheduled should be delayed by 6 months. Polymorphic eruption of pregnancy- key clues starts in striae, SPARES umbilicus, more common to occur in first pregnancy, third trimester; vs Pemphigus Gestationis which STARTS around and involves umbilicus; 1st generation antihistamines (diphenhydramine) are preferred in pregnant patients.
- Vulvar bx techniques: prior to biopsying vulvar dermatoses- the patient should be off topical steroids for 2-4 weeks prior to biopsy. Biopsy technique: Use the suture, lift, and snip technique. Take bite with suture, lift skin and snip with curved iris scissors

Session 21: Phototherapy Updates: Practical Use in Dermatology | Dr. Kristina Callis Duffin

- NB-UVB therapy is ideal for thin plaque psoriasis of trunk/extremities, guttate psoriasis and for psoriasis in pregnant women
- Mean days to clearance is 1.5x faster treating 3x/week vs 2x/week. Course of therapy is typically 12 weeks. Phototherapy can offer remittive effects.
- Phototherapy is absolutely contraindicated in patients with xeroderma pigmentosum or lupus erythematosus. It is relatively contraindicated for patients with a history of photosensitivity diseases, melanoma or non-melanoma skin cancers, organ transplant, or prior arsenic or ionizing radiation.

Session 22: Female Genital Dermatoses | Dr. Lindsay Wilson

- Vulvar papillomatosis is a variant of normal: they have a monomorphic/homogenous appearance vs condyloma have wide base and tapered tips
- Lichen Sclerosus: sudden onset, intense pruritis, with white patches and erythematous patches. Can hide in interlabial sulcus. Scarring can occur in about 65% of women
- 2-5% of women with Lichen Sclerosus will develop SCC