



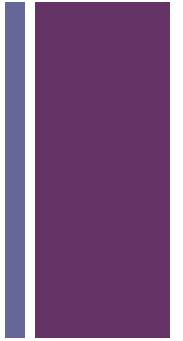
Top 5 Tips to be in the Know!

Dermatology Updates

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#5 – New Melanoma Guidelines



- The American Joint Committee on Cancer (AJCC) updated the staging system for classification of melanoma.
- 8th edition.
- Background: the AJCC is a classification system developed by the for describing the extent of disease progression in cancer patients. It utilizes in part the TNM scoring system: Tumor Size, Lymph Nodes affected and metastases.





Change in T1 classification of Melanoma

7th edition AJCC guidelines

- Melanoma is classified as T1 if:
 - Less than or equal to 1mm thickness
- T1a- nonulcerated and had a mitosis rate of less than 1/mm²
- T1b-ulcerated or had at least 1 mitosis/mm²

8th edition AJCC guidelines

- T1a - nonulcerated and less than 0.8 mm in thickness
- T1b - is 0.8-1.0 mm thick or less than 0.8 mm with ulceration
- Tumor mitotic rate has been dropped as a staging criterion for T1 tumors.



Example:



56 year old Asian American male with a 0.9 mm melanoma with no ulceration or mitotic figures on the back.

7th edition guidelines this would be: T1a

8th edition guidelines this would be: T1b



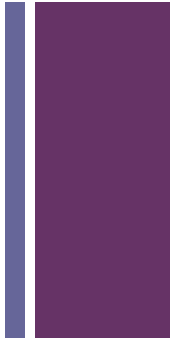
Updated 2017 NCCN guidelines: Sentinel Lymph Node Biopsy (SLNB)

- Not recommended in melanoma in Situ
- If 0.76-1.1mm thickness without ulceration or mitotic rate of at least 1 per mm² → discuss and consider SLNB
 - Evidence suggests that roughly 7% probability of positive result
- If 0.76-1.1mm thickness with ulceration or mitotic rate of at least 1 per mm² → discuss and OFFER SLNB
 - Evidence suggests that roughly 35% probability of positive result





New treatment options for melanoma stage III and IV



- Combination therapies – BRAF + MEK inhibitors work better than individual therapies (Dabrafenib + Trametinib)
- Immunomodulator drugs (CTLA4 and PD1 inhibitors) are most effective at treating melanoma (Combo>PD1>CTLA4)
 - CTLA4 inhibition (Ipilimumab), PD1 inhibition (Pembrolizumab)

Long G V, et al, Adjuvant Dabrafenib plus Trametinib in Stage III BRAF-mutated Melanoma, The New England Journal of Medicine. 2017; 377;19

Lancet Oncology, Vol 17, No 11, p 1558-1568, Nov 2016



#4 - Advances in Atopic Dermatitis (AD) Treatment

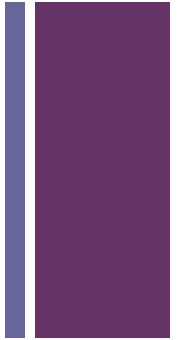
- Atopic Dermatitis aka: Eczema
 - Common skin disease affecting children and adults
 - Manifests as itchy red scaly patches on the cheeks of children, antecubital and popliteal fossae of children and adults
 - Part of the Atopy Triad: Atopic Dermatitis, Allergic rhinitis and Asthma







Current Tx of Atopic Dermatitis



■ Topical Treatments

- Topical Steroids like Desonide (for use on the face or body fold areas), Triamcinolone (for use on the body), Clobetasol (for use on thick plaques)
- Topical Calcineurin inhibitors (Steroid Sparing medications) – Tacrolimus and Pimecrolimus

■ Phototherapy

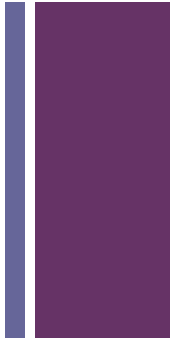
- Most commonly Narrow Band UVB

■ Immunosuppressants

- Methotrexate, Mycophenolate mofetil, Cyclosporine, Azathioprine



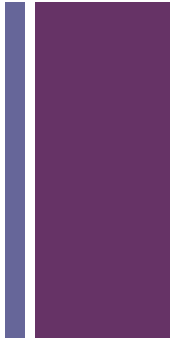
New Medications for use in AD



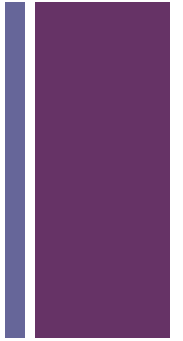
- New non steroidal topical medication
 - Crisaborole approved late 2016
 - Topical PDE4 inhibitor
 - PDE4 is part of the inflammatory cascade
 - Approved for mild to moderate AD in ages 2 and up
 - Formulated as a 2% ointment applied BID with results seen in 28 days



New Medications for use in AD



- Dupilumab – First biologic medication approved for AD
- What is a biologic?
 - It's ALIVE!
 - Given IV or Injections – biologics are proteins derived from living tissue or cells cultured in a lab

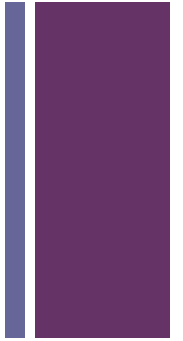


Body contains interleukins (IL) that fight against viruses/bacteria as part of immune system but in AD these are overactive and they result in chronic inflammation

- Dupilumab blocks IL-4 and IL-13 from binding to their cell receptors limiting overreaction of the immune cascade and limiting inflammatory symptoms of AD



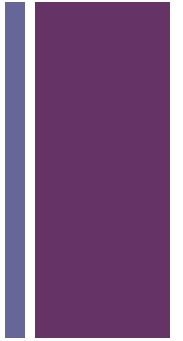
Dupilumab



- Loading dose two injections (600 mg)
- One injection (300 mg) every other week
- Most common adverse reactions: conjunctivitis, injection site reaction, cold sores
- Also note can cause transient elevation in eosinophils so good to have a baseline
- No starting or routine recommended lab testing



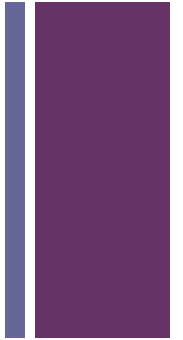
Drugs coming down the pipeline



- Nemolizumab – Phase 2b trials IL-31 blocker receptor A (Late 2019-2020)
- Tralokinumab – Phase 3 trials IL13 (Target) Launch 2020



#3 - Advances in Psoriasis Management



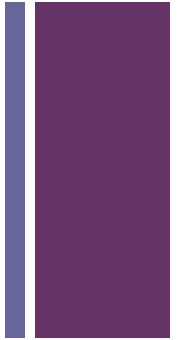
■ Psoriasis

- An immune mediated skin disease that causes raised red scaly plaques commonly on the extensor elbows, knees, scalp, lower back/buttock but can be on any body surface area.
- Itchy
- Associated with other conditions: diabetes, metabolic syndrome, heart disease, depression
- Men and women can develop psoriasis in equal rates, all races
- About 30% of people will develop psoriatic arthritis an inflammatory form of arthritis





Current treatment options



■ Topical Treatments

- Topical Steroids like Desonide (for use on the face or body fold areas), Triamcinolone (for use on the body), Clobetasol (for use on thick plaques)
- Vitamin D topicals -> Calcipotriene
- Vitamin A derivative → Tazarotene

■ Phototherapy

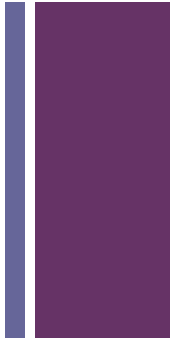
- Narrow Band UVB
- Psoralens + UVA
- Excimer Laser

■ Immunosuppressants

- Methotrexate, Cyclosporine, Azathioprine, Acitretin



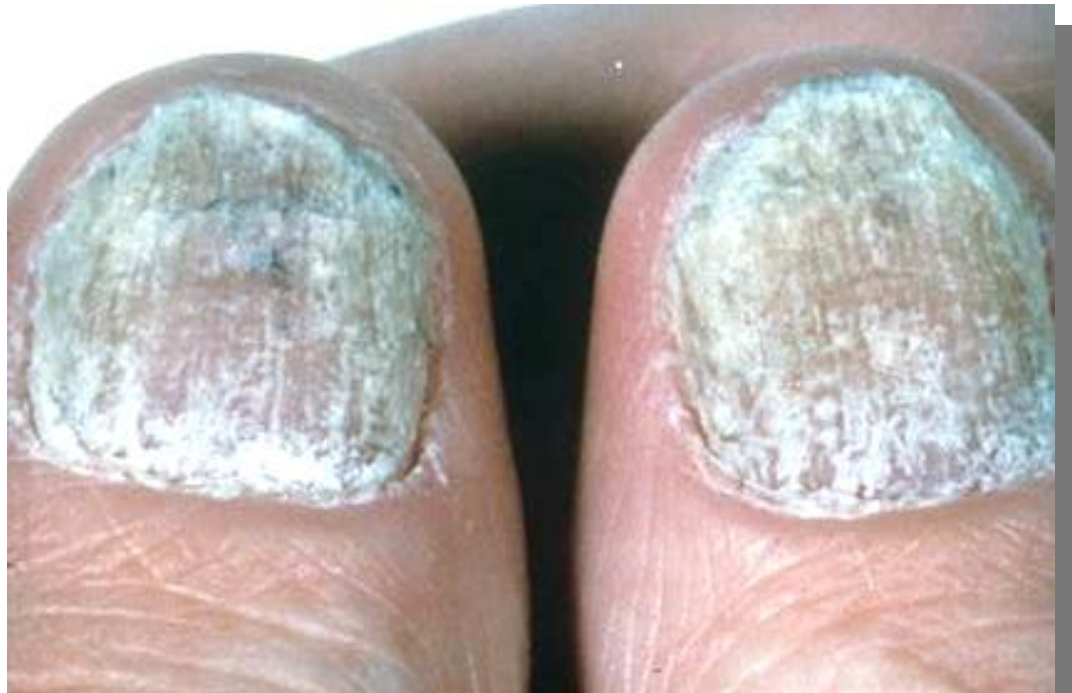
New Oral Medication for use in Psoriasis



- Unlike traditional treatments for Psoriasis recent medications target specific parts of immune system pathways selectively
- Apremilast
 - Inhibits an enzyme known as phosphodiesterase 4 (PDE4) that controls inflammatory action within cells and effects inflammation
 - 30 mg twice daily dosing, after a 5 day start taper
 - Meant to be taken continuously to maintain improvement
 - Adverse effects: Diarrhea, Nausea, URI, Headache,
 - More rare depression, weight decrease
 - Think about using it in combination with phototherapy or topicals

+ New Biologics for use in Psoriasis

- What is a biologic?
 - It's ALIVE!
 - Given IV or Injections – biologics are proteins derived from living tissue or cells cultured in a lab



Treatment Comparison

6600 SW 92nd Ave., Suite 300 Portland, OR 97223
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www.psoriasis.org



Biologic treatments

Treatment type	Indication	Mechanism of Action	Method of Delivery	Dosage and Frequency	Possible Side Effects*	Warning and Precautions**
<div>Secukinumab</div>	Psoriasis (Adults) Psoriatic arthritis (Adults)	Blocks interleukin 17 (IL-17)	Subcutaneous self-injection	Psoriasis and/or psoriatic arthritis: Week 0, 1, 2, 3 and 4, then every four weeks	Cold or flu-like symptoms Diarrhea Upper respiratory infection	Serious infection Tuberculosis (TB) testing before starting Cosentyx Inflammatory bowel disease (IBD) Serious allergic reaction
<div>Etanercept</div>	Psoriasis (People over 4 yrs) Psoriatic arthritis (Adults)	Blocks TNF-Alpha	Subcutaneous self-injection	Adult psoriasis: Twice weekly for 3 months, then once weekly Pediatric psoriasis: Once weekly Adult psoriatic arthritis: Once weekly	Infection Injection site reaction	Serious infection Fungal infection Nervous system problem Lymphoma New or worsening heart failure Low blood count Hepatitis B reactivation Serious allergic reaction Lupus-like syndrome
<div>Biosimilar to Etanercept</div>						
<div>Adalimumab</div>	Psoriasis (Adults) Psoriatic arthritis (Adults)	Blocks TNF-Alpha	Subcutaneous self-injection	Psoriasis and/or psoriatic arthritis: Once every other week	Infection (including upper respiratory and sinus) Injection site reaction Headache Rash	Serious infection Fungal infection Malignancies Serious allergic reaction Hepatitis B reactivation Nervous system problem Low blood count New or worsening heart failure Lupus-like syndrome
<div>Biosimilar to Adalimumab</div>						
<div>Biosimilar to Adalimumab</div>						

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<div>Infliximab</div> <div></div> <div></div> <div>Biosimilar to Infliximab</div> <div></div> <div>Biosimilar to Infliximab</div> <div></div> <div>Biosimilar to Infliximab</div> <div></div>	Psoriasis (Adults) Psoriatic arthritis (Adults)	Blocks TNF-Alpha	IV infusion by a health care provider	Psoriasis and/or psoriatic arthritis: Week 0, 2, and 6, then every 8 weeks	Infections (including upper respiratory, sinus and throat) Infusion-related reaction Headache Stomach pain	Serious infection (especially when switching between biologics) Fungal infection Malignancies Hepatitis B reactivation Liver problem (including hepatotoxicity) New or worsening heart failure Low blood count Nervous system problem Lupus-like syndrome Special consideration when receiving a live vaccine Serious allergic reaction
<div></div> <div>Brodalumab</div> <div></div> <div></div>	Psoriasis (Adults)	Blocks IL-17	Subcutaneous self-injection	Psoriasis: Week 0, 1, 2, then every 2 weeks	Joint pain Headache Fatigue Diarrhea Throat pain Nausea Muscle pain Injection site reaction Cold or flu-like symptoms Low blood count Fungal infection	Suicidal ideation and behavior Serious infection TB testing before starting Siliq Crohn's disease Special consideration when receiving a live vaccine

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Biologic treatments

Treatment type	Indication	Mechanism of Action	Method of Delivery	Dosage and Frequency	Possible Side Effects*	Warning and Precautions**
<div>Ixekizumab</div>	Psoriasis (Adults) Psoriatic arthritis (Adults)	Blocks IL-17	Subcutaneous self-injection	Psoriasis: Week 0 and every 2 weeks for 3 months, then every 4 weeks Psoriatic arthritis: Week 0, then every 4 weeks	Injection site reaction Upper respiratory infection Nausea Fungal infection	Serious infection TB testing before starting Taltz Serious allergic reaction Inflammatory bowel disease
<div>Guselkumab</div>	Psoriasis (Adults)	Blocks interleukin 23 (IL-23)	Subcutaneous self-injection	Psoriasis: Week 0 and 4, then every 8 weeks	Upper respiratory infection Headache Injection site reaction Joint pain Diarrhea Stomach flu Fungal infection Herpes simplex infection	Serious infection TB testing before starting Tremfya
<div>Ustekinumab</div>	Psoriasis (People over 12 yrs) Psoriatic arthritis (Adults)	Blocks interleukin 12 and 23 (IL-12/23)	Subcutaneous self-injection	Psoriasis and/or psoriatic arthritis: Week 0 and 4, then every 12 weeks	Cold or flu-like symptoms Upper respiratory infection Headache Fatigue	Serious infection (especially from mycobacteria, salmonella and Bacillus Calmette-Guerin (BCG) vaccinations) TB testing before starting Stelara Malignancies Serious allergic reaction Reversible posterior leukoencephalopathy syndrome



Hidradenitis suppurativa (HS)

- HS is a chronic inflammatory disorder of the apocrine glands
- Follicular occlusion leads to trapped follicular contents, rupture, inflammation of the dermis and superinfection
- Adalimumab has new indication to treat moderate to severe HS in people 12 years of age and older





#2 – New medication for the treatment of Urticaria

- Urticaria, Hives, are raised edematous wheals caused by histamine release from mast cells
- Triggers by a variety of mechanisms both allergic and non allergic – in half the cases the inciting factor never identified
- 40% associated with URI, 9% drug, 1% food
- Pruritus (itch), stinging, pain
- Acute (less than 6 weeks)
 - MC children
- Chronic (more than 6 weeks)
 - MC in women, middle aged
 - Resolves in 12 months in approx 50% of adults with idiopathic urticaria



+ Triggers for Urticaria

■ Drugs

- Aspirin, NSAIDs, morphine, codeine, PCN, Cephalosporins, Sulfa, Tetracyclines, blood products, radiographic contrast, Angiotensin-converting enzyme inhibitors,

■ Infection

■ Insect bites (papular urticaria)

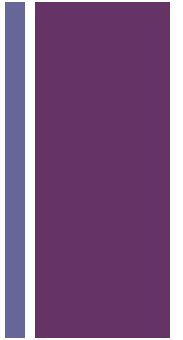
■ Pregnancy

■ Foods

■ Heat, cold, solar, pressure, water



Current Management/treatment of Urticaria: Things to consider

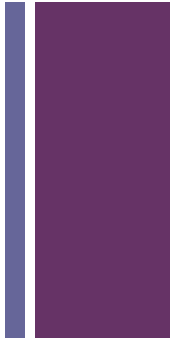


- Acute vs Chronic: → Acute usually resolves
- Is anaphylaxis present (hypotension, respiratory distress, throat scratchiness, swelling of mucous membranes (tongue, throat, lips))? → epinephrine
- Can we identify triggers → if so avoid





Current Management/treatment of Urticaria



- Nonsedating H1 antagonists:

- Cetirizine 10 mg QHS, BID
- Fexofenadine 120 -180 mg

- Sedating Antihistamines:

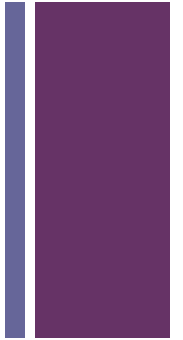
- Diphenhydramine 10-25 mg up to 4 times daily
- Hydroxyzine 10-25 mg up to 4 times daily
- Doxepin 10-50 mg up to 3 times daily

- Leukotriene inhibitors can be used in combination with antihistamines

- Montelukast 10 mg daily



Omalizumab for Urticaria



- This is a humanized monoclonal IgG antibody against IgE
 - Approved for adults and children 12 and up for urticaria symptomatic on H1 antihistamines
 - 150 or 300 mg subcutaneous injections every 4 weeks
 - No routine baseline or monitoring labs
 - Commonly reported Adverse effects:
 - Headache, tired feeling, joint/muscle pain, rash, injection site reaction, hair loss, URI symptoms, dizziness



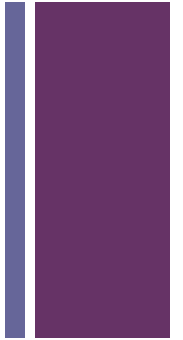
#1 – Topical prescription strength Retinol now available OTC

- Adapalene Gel 0.1% for over the counter use to treat acne.
- First retinoid approved for OTC use.
- Indications:
 - Comedonal acne (treatment of choice)
 - Fine line and wrinkle prevention, it decreases collagen resorption
 - Evens skin tone





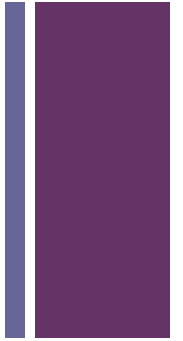
+ Adapelene gel 0.1%



- Comparable to Tretinoin 0.025% cream in efficacy and slightly better than Tretinoin 0.025% in tolerability.
- Good for use in men and women all ages except women who are pregnant
- Common adverse effect: dryness, redness, peeling, photosensitivity → this can be alleviated by decreasing the amount used and applying moisturizer



Bonus: Sunscreen Primer



- What do you need to know about sunscreen?
- Broad spectrum → Protective against UVA and UVB
 - UVA → rays that cause tans, aging (brown spots, wrinkles),
 - UVB → rays that cause burning
- SPF 30-50 – SPF 15 is not considered protective enough.
- Use daily on the face, neck, upper chest, backs of the hands