DERMATOLOGIC CONDITIONS IN SKIN OF COLOR PEER-TO-PEER EDUCATIONAL TOOLKIT

A compilation of key content from select presentations at the 2021 South Beach Symposium Part I: Medical Dermatology Summit and the Masters of Pediatric Dermatology

Latanya Benjamin, MD, FAAD, FAAP

Associate Professor of Pediatric Dermatology

Valerie Callender, MD

Professor of Dermatology Howard University College of Medicine, Washington, DC Medical Director, Callender Dermatology & Cosmetic Center Glenn Dale, MD

Seemal Desai, MD, FAAD

Clinical Assistant Professor
Department of Dermatology
University of Texas Southwestern Medical Center
Dallas, Texas, USA
Innovative Dermatology, PA

Candrice Heath, MD, FAAP, FAAD

Assistant Professor of Dermatology Lewis Katz School of Medicine, Temple University Philadelphia, PA

Amy McMichael, MD

Professor and Chair Department of Dermatology Wake Forest Baptist Medical Center Winston-Salem, NC





Pediatric Patients of Color

Acne

Atopic Dermatitis

Keloids

Vitiligo

Tinea Capitis

Traction Alopecia





Acne Treatments

Topical Antibiotics	Oral Antibiotics	Topical Retinoids	Oral Retinoids	Topical Anti- androgen	Oral anti-androgen
minocycline 4% foam	sarecycline	trifarotene 0.005% cream tazarotene 0.045% lotion		clascoterone 1% cream	
clindamycin, dapsone	doxycycline, minocycline	tretinoin, adapalene	isotretinoin		spironolactone

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Acne: Tips for Communication

Communicate why you are taking each step

Set reasonable expectations

Discuss the patient journey

Partner with the patient

- Explain that you are going to treat both their acne symptoms and their hyperpigmentation symptoms concurrently
- Keep in mind the parents' personal history of skin concerns when explaining the treatment process

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Atopic Dermatitis: Patients of Color

- AD disproportionally affects Black children
- Among US children, more likely to suffer from AD and more likely to seek medical care for AD
- More disfiguring in SOC patients (hypo/hyper-pigmentation)
- Challenges in diagnosing and treating in pediatric SOC patients





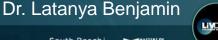
Atopic Dermatitis: Pathogenesis

- Complex, multifactorial, poorly understood
- Endogenous factors:
 - Genetic predisposition
 - Defective skin barrier
 - Abnormal innate immunity
 - Immunologic abnormalities
- Interaction with exogenous factors



AD: Treating Infection

- Culture (Bacterial, Viral DFA)
- Bacterial
 - Topical: mupirocin, ozenoxacin
 - Liquid: Cephalexin
 - Pills: Cephalexin or Dicloxacillin
 - Clindamycin, Sulfamethoxazole-Trimethoprim, Doxycycline if concerned about MRSA
 - Treat 7-14 days
 - Continue to treat skin as well!



AD Treatment Overview

Step 4: Phototherapy, SCs, systemic immunomodulators

Step 3: Higher potency topical steroids, wet dressings, oral antihistamines, evaluate and treat for secondary infection

Step 2: Topical steroids (TCs), Calcineurin inhibitors (TCIs), phosphodiesterase-4 inhibitor

Step 1: Education, bathing, gentle skin care, moisturizing, avoidance of triggers

Dupilumab

- Currently, only one systemic biologic drug FDA approved
- Targets IL-4 and IL-13
- Dupilumab injection 200mg and 300mg
- First biologic approved for children aged 6 years and older with uncontrolled moderate to severe AD

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Emerging AD Therapies

- Tralokinumab (12-17 years) Phase 3 clinical trial
- Upadacitinib
- Abrocitinib
- Ruxolitinib (12 years and older)
- Baricitinib (ages 2 and up)

Keloids: Skin of Color

- African descent affected 5-16 times more than those with light skin tones
 - Hispanics and Asians also at higher risk
- Onset most common after puberty
 - Average age is 22-23 years old
- Physiological differences:

	Caucasian	African descent	
Dermis	Thin, less compact	Thick, compact	
Fibroblasts	Few	Large, numerous	

Fibroblasts interact with other cells and growth factors \rightarrow keloid formation

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Keloids: Intralesional Triamcinolone

- Potential pitfalls:
 - If diluting the triamcinolone:
 - Mix appropriately (precipitates) roll
 - Don't overdilute
 - Saline vs lidocaine
 - Equipment:
 - Luer-lock syringes to avoid the needle flying off the syringe and creating a splash or spray

- Injection technique:
 - Create a tunnel
 - Retrograde injection
 - Goal = not to inject subcutaneously

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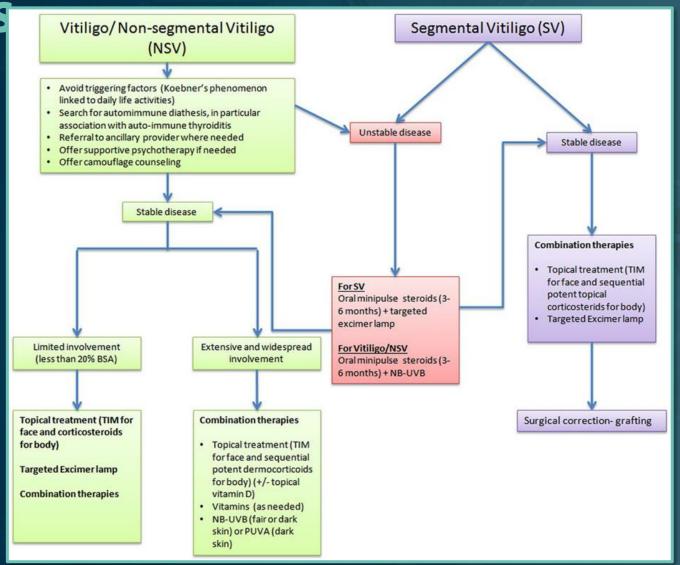
Vitiligo

- Autoimmune disease in which cutaneous depigmentation occurs
- Existing therapies are inadequate and limited

- About 45% of children nationally (higher in some states) are on Medicaid plans (under CHIPS Act)
- Despite the fact that vitiligo has a QoL impact greater than many systemic diseases, it is rarely considered by third-party payors who tend to treat vitiligo as a cosmetic rather than a medical issue, thereby disproportionately impacting persons of color

Vitiligo: Treatments

- Conventional Therapies:
 - Topical corticosteroids (TCs)
 - Topical calcineurin inhibitors (TCIs)
 - Systemic corticosteroids (SCs)
 - Phototherapy

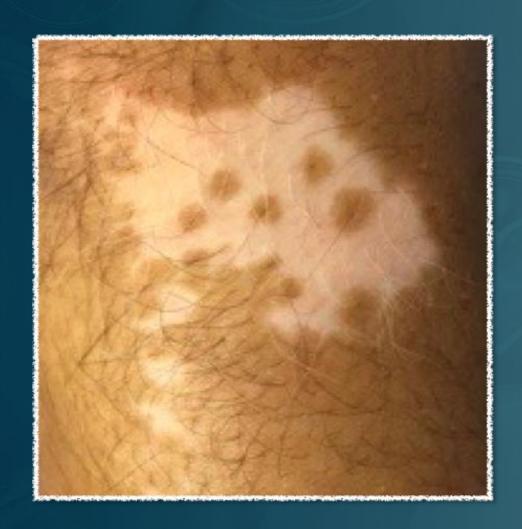


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Vitiligo: Treatments

- Unconventional Therapies:
 - Melagenina
 - Alcoholic extract of human placenta
 - Said to produce proliferation of melanocytes and enhance melanogenesis in vitiligo skin





Psychological Considerations

- Camouflaging cosmetics
 - Covermark
 - Dermacolor
 - Keromask
 - Veil
 - Vichy (Dermablend)

- Depigmentation therapies
 - Monobenzyl ether of hydroquinone (MBEH)
 - Phenol 88%
 - 4-methoxphenol (4MP, mequinol, p-hydroxyanisol)
 - Physical therapies (cryotherapy, lasers)

https://vitiligosociety.org/skin-camouflage

Grimes PE, Nashawati R. Depigmentation Therapy for Vitiligo. Dermatol Clin 35 (2017);219-227

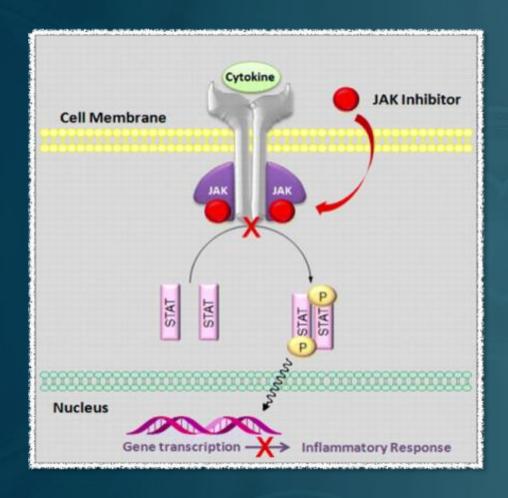
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Emerging Therapies for Vitiligo

- Ruxolitinib (JAK1/JAK2 inh)
 *both adolescent and adults
- Ritlecitinib (PF-06651600)
 (JAK3/TEC inhibitor)
- Brepocitinib (PF-06700841) (TYK2/JAK1 inhibitor)
- Cerdulatinib (JAK/SYK inh)



Traction Alopecia

- Commonly seen in African American females
- Induced by tight braids held with elastic bands
- Early disease is often reversible, while late disease typically leads to permanent hair loss

- Clinical Findings:
 - Short, thinning hair at frontal hairline or between braids
 - Papules
 - Perifollicular erythema & pustules (traction folliculitis)

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Traction Alopecia: Treatment

- Early-stage
 - Loosen braids or pony-tail
 - Topical minoxidil
 - Local corticosteroids
 - Oral antibiotics

- Late-stage
 - Cosmetic camouflage
 - Hair transplantation



Tinea Capitis: Treatment

- **Antifungal shampoos**
 - May help with household spread
 - Decrease transmissible fungal spores
- **Conditioners**
 - May help with household spread
 - Household should use it as well
- Watch out for hair dryness → breakage

Greer DL. Successful treatment of tinea capitis with 2% ketoconazole shampoo. Int J Dermatol 2000 Sharma V et al. Do hair care practices affect the acquisition of tinea capitis? Arch Pediatric Adolesc Med. 2001

- Griseofulvin microsize (125 mg/5 mL)
 - 20-25mg/kg/day
 - Approved for (10-20 mg/kg/day)
- 8-12 weeks
 - Approved for kids 2+ years (tinea capitis)
- Terbinafine 250 mg tab

10-20 kg : 62.5 mg/day

20-40 kg: 125 mg/day

>40 kg: 250mg/day

2 to 4 6 weeks for trichophyton

8-12 weeks for microsporum

- Approved for kids 2+ years (onychomycosis)
- Approved for kids 4+ years (tinea capitis)

Epocrates Accessed January 2021. Gupta AK. Drummond-Main C. Meta-Analysis of Randomized, Controlled Trials Comparing Particular Doses of Griseofulvin and Terbinafine for the Treatment of Tinea Capitis. Pediatr Dermatol 2013;30:1-6. Chen X et al. . Systemic antifungal therapy for tinea capitis in children. Cochrane Database Syst Rev. 2016

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Tightly Coiled Hair Care Practices

Typical hair washing practice:

- Remove current style (30 min 3 hrs depending on style)
- Wash
- Rinse
- Wash
- Rinse
- Condition
- Detangle (15 min with large tooth comb)
- Rinse
- Leave-in-conditioner
- Detangle (1 hr)
- Style (1-3+ hrs)
- Frequency every 1-2 weeks

- How to use antifungal shampoo on tightly coiled hair:
 - Parent may apply antifungal shampoo directly to scalp (ex. Ketoconazole shampoo)
 - Wait 5-10 minutes
 - Rinse
 - Shampoo scalp & hair with moisturizing shampoo
 - Condition with moisturizing conditioner
 - Style the hair as desired

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Tinea Capitis: Not Responding as Expected?

- Options:
 - Check the dose
 - Extend the course
 - Review optimal foods to give
 - griseofulvin with fatty foods
 - Divide the dosing (Griseo)
 - Change the drug
 - Check the siblings



Hubbard TW. The predictive value of symptoms in diagnosing childhood tinea capitis. *Arch Pediatr Adolesc Med* 1999; 153: 1150-1153.







Adult Patients of Color

Melasma

Aesthetic Procedures

Hyperpigmentation







Melasma Therapeutic Ladder

- Sunscreen, sunscreen (prefer inorganic, tinted)
- Hydroquinone 4% or triple combination bleaching agents
- Cysteamine topical
- Topical tranexamic acid, topical Vitamin C, microdermabrasion, chemical peels
- Micro-needling with PRP
- Oral tranexamic acid
- Rarely use >4% concentration hydroquinone
- 5 minutes in the sun will undo all your work

Melasma: Treatment Options

- Topical Retinoids & Combination Therapy
- Azelaic Acid
- Hydroquinone
- Chemical Peels
- Cosmeceuticals
- Lasers
- Dermabrasion
- Reassurance and Time

Dr. Seemal Desai





Chemical Peels

- Jessner's + TCA 20% for full face acne scars, especially when not deep boxcar or ice pick
 - Can do in skin of color
 - One layer after another
- Salicylic acid 30% and 10%-20% Mandelic for Acne Vulgaris
 - Works great for acne and also rejuvenation
 - Synergy between and alpha and beta hydroxy!
- TCA 10% immediately after microneedling for dark circles
 - Procedure only lasts about 5 minutes
 - Depth of 0.5mm → SHALLOW







Cosmetic Procedure Prep: Skin of Color

- Priming the skin for many aesthetic procedures is important in Skin of Color
- Sunscreen SPF30 should be used along with cosmeceuticals and consider inorganic sunscreens
- All retinoids, including OTC should be stopped 5-7 days prior to any aesthetic treatments, and GET HSV HISTORY!!





Post-Inflammatory Hyperpigmentation (PIH)

- Temporary pigmentation that follows injury or inflammatory disorder of skin
 - AKA: Acquired melanosis
- More common in darker skin types
 - Fitzpatrick Type IV and higher
- Most common pigmentary disorder
- Commonly associated with:
 - Any inflammatory condition including:
 - Acne
 - **Psoriasis**
 - **Arthropod Insults**



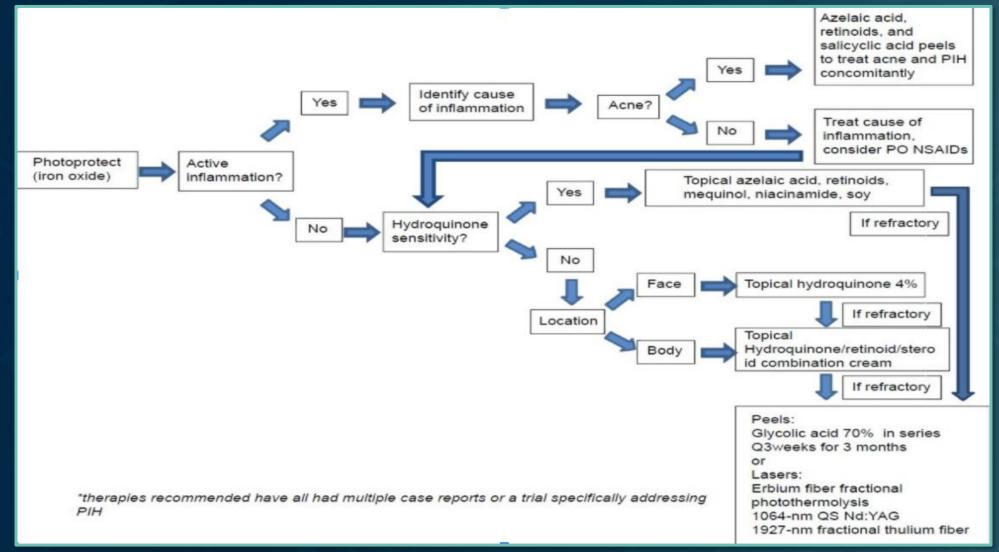
PIH: Treatments

- Always 1st
 - Treat the cause and sun protect
- Sun protection
- Hydroquinone
- Azelaic Acid
- Tretinoin
- Corticosteroids
- Chemical Peels

- Salicylic acid and glycolic acid
- Kojic Acid
- Laser Treatment
- QS ND:Yag, QS Ruby
- Intense Pulse Light Therapy (IPL)



PIH: Treatment





Hydroquinone for Skin Lightening

- Gold standard for skin lightening
- Monotherapy
- Combination therapy
 - HQ4% microencapsulated + retinol 0.15% + antioxidant
 - HQ4% + retinol 0.3%
 - HQ4% + tretinoin 0.05% + fluocinolone 0.01% = TC cream
- Compounding pharmacy
 - Hydroguinone 4-10 %
 - Tretinoin cream 0.025% 20g
 - Desonide cream 0.05% 30g
 - Ascorbic acid 500 mg

Grimes PE. Cutis 2007;80(6):497-592. Callender VD, Davis Ec. JCAD 2010;3(7):20-31.





Cosmeceuticals for Hyperpigmentation

- Retinol & derivatives
- Arbutin & deoxyarbutin
- Kojic acid
- Licorice extract
- Vitamin C
- Glutathione
- Ellagic acid
- Soy
- Aleosin

- Emblica Extract
- Lignin Peroxidase
- Niacinamide
- N-acetyl glucosamine
- Transexamic acid
- Oligopeptides (decapeptide-12 0.01%)
- Procyanidin + Vitamins A,C & E
- Newer topical agents with a multimodal approach





Hyperpigmentation: Therapeutic Strategy

- A multimodal approach
- Individualized treatment plan
 - Clinical presentation
 - General health
 - Financial resources
 - Levels of compliance & reliability
- Photoprotection is an essential component
- Procedural treatments must be used with caution in SOC patients

