Disparities in Dermatology: Improving Visual Recognition and Representation from Book to Bedside

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DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIP(S) OR CONFLICT OF INTEREST WITH INDUSTRY

Nothing to disclose

Learning Objectives

At the conclusion of this session, participants should be able to:

- Differentiate physiological differences in skin tone and hair structure
- Recognize visual variation in clinical presentations of skin and hair conditions across the spectrum of skin tones and hair types
- Examine the social determinants of health impacting provider bias in diagnosis and treatment of dermatologic conditions for people of color

Defining Skin and Hair Differences

Definition

According to *Taylor and Kelly's Dermatology for Skin of Color*, skin of color is defined as "individuals of particular racial and ethnic groups who share similar cutaneous characteristics and disorders, as well as reaction patterns to those disorders".

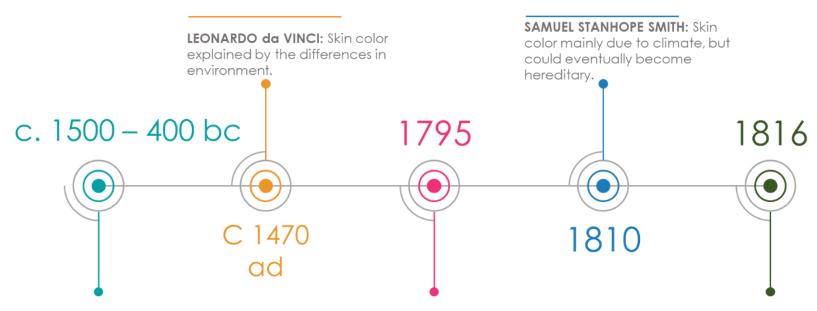
Five categories for race in the United States

- 1. American Indian or Alaska Native
 - o Native American, Eskimo, Aleut
- 2. Asian
 - o Filipino, Chinese, Japanese, Korean, Vietnamese, Thai, Malaysian, Laotian, Hmong, Indian, Pakistani
- 3. Black
 - o African, African Caribbean, African American
- 4. Native Hawaiian or other Pacific Islander
- 5. White

a Data from the United States Census 2010.

THEORY ON SKIN OF COLOR ORIGIN





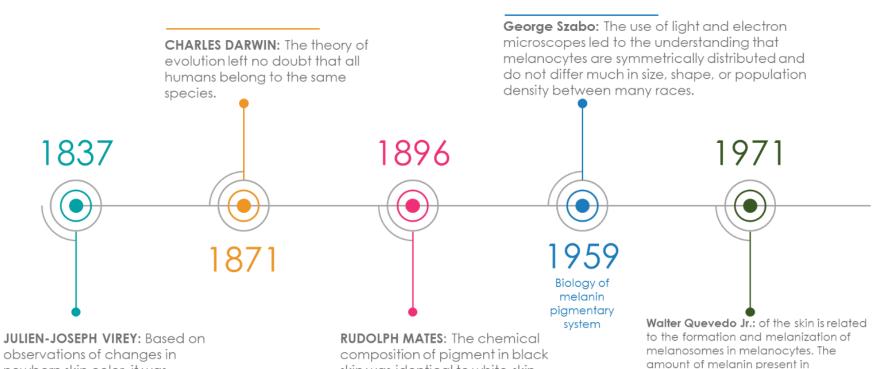
ANCIENT GREEKS: Phaeton flew the sun chariot too close to the earth burning black or too far from the earth turning pale.

JOHANN F. BLUMENBACK: Skin color differences produced by a combination of climate and other factors. Dark skin was thought to result from CO2 due to the heat from tropical climates.

JOHANN MECKEL: Skin color emanated from the cortical part of the brain

THEORY ON SKIN OF COLOR ORIGIN





Adapted From Taylor & Kelly's Dermatology for Skin of Color, 2016

skin was identical to white-skin.

keratinocytes is the essential factor in

determining skin color.

newborn skin color, it was

determined that external factors

had little or no effect on skin color.

THEORY ON SKIN OF COLOR ORIGIN



THOMAS B FITZPATRICK: Fitzpatrick skin type scheme classifies skin types I to VI by the response of the skin to sun exposure, in terms of the degree of burning and tanning of the skin. Dermatologist adopted this classification without correlating the amount of sun exposure to the skin type category.

NINA JABLONSKI & GEORGE CHAPIN: Skin pigmentation is the result of natural evolutionary processes trying to balance between protecting the skin from harmful UV rays and the absorption of vitamin D.

1987 Beginning of modern scientific theories 1988

1990-2003

Genetics & the DNA of skin color

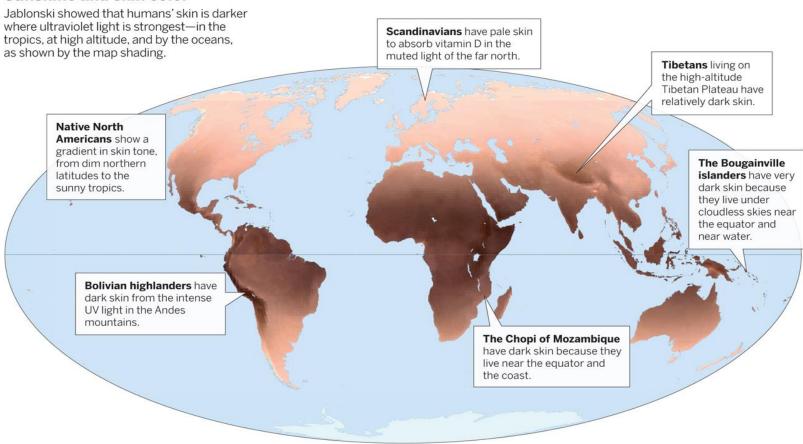


2010

CHARLES LORING BRACE IV: The need for protection from UV radiation leads to darker skin color.

HUMAN GENOME PROJECT (HGP): HGP helped redefine who humans are and how we have evolved. The mapping of DNA has proven that human beings are genetically the same and that skin color is a simple variation.

Sunshine and skin color



CC-BY image - Norton, H.L., Quillen, E.E., Bigham, A.W. et al. Human races are not like dog breeds: refuting a racist analogy. Evo Edu Outreach 12, 17 (2019). https://doi.org/10.1186/s12052-019-0109-y



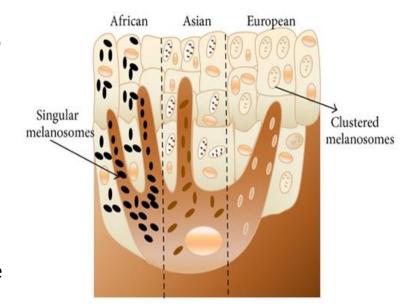


Skin Pigment Differences

The amount of melanocytes is the same for all skin colors, but the activity of melanocytes differ by skin color and body location.

Skin pigmentation varies by melanosomes that are converted by melanocytes to keratinocytes.

Skin tone differs based on the melanosome size, density and aggregation.

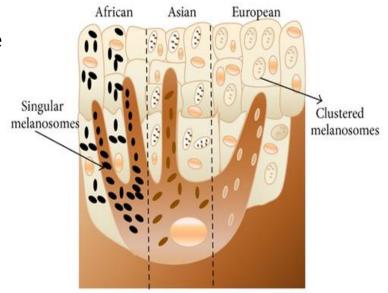


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Skin Pigment Differences

All skin tones have the same thickness of the stratum corneum (SC)

Highly pigmented skin (independent of ethnicity) has more cornified compact cell layers in the SC creating a strong epidermal surface allowing for faster recovery when the skin barrier is damaged (evolutionary trait)



CC-BY - Zaidi, KU., Ali, AS., Ali, SA., Naaz, I. 2014. *Microbial Tyrosinases: Promising Enzymes for Pharmaceutical, Food Bioprocessing, and Environmental Industry*. Biochemistry Research International. Retrieved from http://dx.doi.org/10.1155/2014/854687

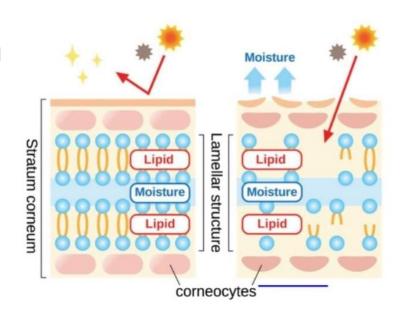
Skin Structure & Ceramides

Ceramides, cholesterol, and long-chain saturated fatty acids are the structural composition of the intracellular spaces in the stratum corneum.

These help skin retain water and electrolytes.

Ceramides make up 50% of the stratum corneum

This composition is important to comparing water retention of skin types and increased transepidermal water loss (TEWL).

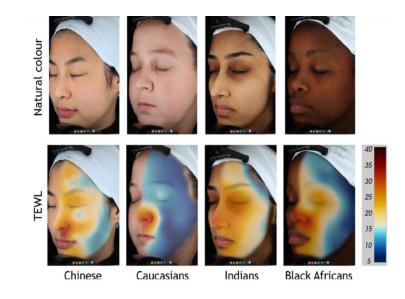


Transepidermal Water Loss in Skin of Color

There are skin differences in lipid amounts that affect ceramide levels

Highly pigmented skin correlates with lower ceramides and is thought to cause increased TEWL, poor water retention, and high water evaporation.

This leads to high rates of xerosis, scaliness and ashiness in dermatological pathology.



CC -BY image - Voegeli, Rainer & Rawlings, Anthony & Seroul, Pierre & Summers, Beverley. (2015). A novel continuous color mapping approach for visualization of facial skin hydration and transepidermal water loss for four ethnic groups. International journal of cosmetic science. 37. 10.1111/ics.12265.



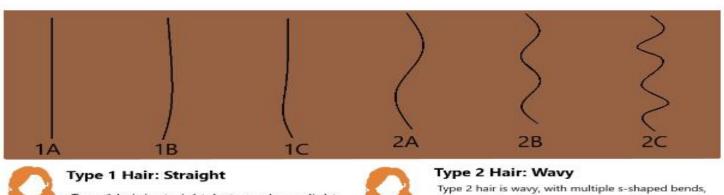


HAIR

Differences in Hair

Understanding differences in hair between races/ethnicities and why they occur leads to more informed, culturally sensitive recommendations for treating and managing hair aging concerns



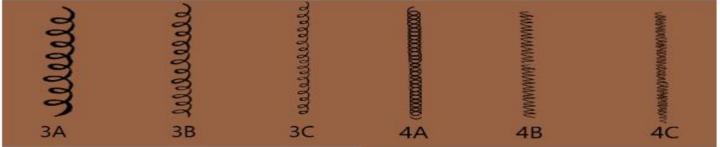




Type 1 hair is straight, but may have slight bends as it grows long.



and multiple clumps may twist or twirl together to give the appearance of loose curls.





Type 3 Hair: Curly

Type 3 hair is curly, and spiral width ranges from a looped shape to ringlets and corkscrews.



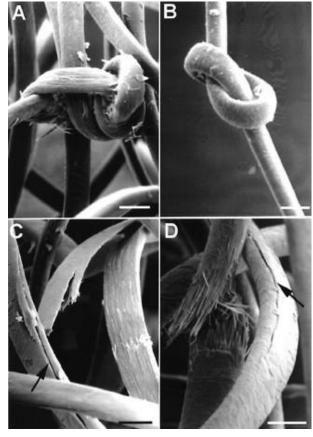
Type 4 Hair: Coily

Type 4 hair is tightly coiled and tends to shrink up close to the scalp.



Hair Group Categorization	Morphology	Hair Lipid Content	Tensile Strength	Density	Growth
White	Straight, wavy or curly	Low	High	High	Medium
African	Helical, coiled or spiraled	Low	Low	Low	Low
Asian	Straight	High	High	Low	High

Adapted From Taylor & Kelly's Dermatology for Skin of Color, 2016



CC-BY image
Aughm C., Okoye, G. (2017). Fundamentals of ethnic hair. Springer, Cham. https://doi.org/10.1007/978-3-319-45695-9

Hair Structure Differences

Keratin structure is the same for all racial groups

Hair lipids found in hair cuticle cell membrane differs by race, which contributes to quality of hydrophobicity, moisturization, and damage incurred from UVA and UVB exposure

Hair Differences

Even when considering something such as premature graying

Dependent on the race of the patient, the age of when it is considered premature is different





Nina via Instagram

Shampoo Regimen	Conditioner Regimen	Hair Breakage Prevention	
Every 1-2 weeks, might be longer depending on patient hair style	Always complete after shampooing	Detangle hair with leave-in conditioner using fingers first and if needed wide toothed comb. Moisturize every 2-3 days	
cocamidopropyl betaine, c14-16 olefin sulfonate, decyl-glucoside, stearamidopropyl dimethylamine	fatty alcohols (cetyl alcohol, stearyl alcohol, behentrimonium methosulfate, and natural oils ROSEMARY & MINT ROSEMARY & MI	Sheaf of cisture White Stein College of Col	

Curly to Coiled Hair Type - Hair Products to Consider

J Clin Aesthet Dermatol. 2021 Jan; 14(1): 38–44.

Hair Aging in Different Races and Ethnicities

Mayra B. C. Maymone, MD, DSc, Melissa Laughter, PhD, Samara Pollock, BA, Iman Khan, MS, MPH, Thaís Marques, MD, Rana Abdat, MD, MSc, Lynne J. Goldberg, MD, and Neelam A. Vashi, MD

Virginia Dermatology Society - July 2021 virtual event on hair loss and practical political advocacy for women of color. A virtual toolkit was created https://bit.ly/vadermhairlosstoolkit



CROWN Act

https://www.thecrownact.com/

- Creating a Respectful and Open World for Natural hair
- As health care providers we can advocate on behalf of our patients

Quoted from the website - "The CROWN Act was created in 2019 by Dove and the CROWN Coalition, in partnership with then State Senator Holly J. Mitchell of California, to ensure protection against discrimination based on race-based hairstyles by extending statutory protection to hair texture and protective styles such as braids, locs, twists, and knots in the workplace and public schools"



Erythema

Erythema is commonly less evident in skin of color

It may appear as light or dark brown to black-grey hyperpigmented lesions



CC - BY images
Lee, T., Dominguez, A.R. (2014). Drug Eruptions. In: Jackson-Richards, D., Pandya, A. (eds) Dermatology Atlas for Skin of Color. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-54446-0_50



Erythema

When discerning possible infection we are taught to the technique of diascopy

Lighter-pigmented skin is easy to visualize; In contrast, in skin of color, the blanching would be difficult, if not impossible, to see



CC-BY image Damevska, K., Vassileva, S., Drenovska, K., Kostadinova-Kunovska, S., Mateeva, V. (2021). Sarcoidosis. In: Ranawaka, R.R., Kannangara, A.P., Karawita, A. (eds) Atlas of Dermatoses in Pigmented Skin. Springer, Singapore. https://doi.org/10.1007/978-981-15-5483-4_23

Historical Adverse Health Outcomes in Skin Cancer

Skin Cancer - Melanoma

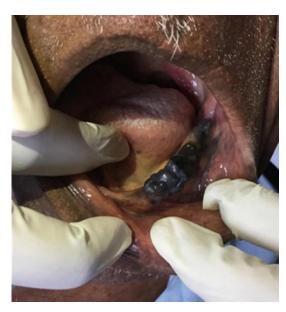
Blacks are 4 times more likely to present with stage IV melanoma

5-year survival rates for the black population is 74.1%, which is significantly lower than that of whites at 92.9%

Skin Cancer - Melanoma

Melanoma in patients with skin of color differs with respect to incidence and anatomic location

Most common locations for melanoma in melanated patients are acral, mucosal, and subungual body sites - accounting for 60–75 % of lesions



CC-BY images Ranawaka, R.R., de Silva, K., Abeygunasekara, P.H. (2021). Skin Carcinomas. In: Ranawaka, R.R., Kannangara, A.P., Karawita, A. (eds) Atlas of Dermatoses in Pigmented Skin. Springer, Singapore. https://doi.org/10.1007/978-981-15-5483-4_50





CC-BY images Currimbhoy, S., Srivastava, D. (2014). Melanoma. In: Jackson-Richards, D., Pandya, A. (eds) Dermatology Atlas for Skin of Color. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-54446-0_45

Melanoma

Skin Cancer - Squamous

Only 35 % of SCC in skin of color are found on sun-exposed areas of the head and neck

8.5 times more frequently found in non-sun-exposed areas in Blacks compared with Whites

Skin Cancer - Squamous

30–40 % of SCC in people of color develop in scars or chronic, nonhealing ulcers, compared to less than 2 % in Whites

In Blacks, SCC presents in the anogenital region in 10–23 % of cases



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Ranawaka, R.R., de Silva, K., Abeygunasekara, P.H. (2021). Skin Carcinomas. In: Ranawaka, R.R.,
Kannangara, A.P., Karawita, A. (eds) Atlas of Dermatoses in Pigmented Skin. Springer, Singapore.
https://doi.org/10.1007/978-981-15-5483-4_50

Skin Protective Behaviors

A 2020 Consumer Reports study of 2007 people revealed that 61% of Black people and 23% of Hispanics never wear sunscreen

Themes revealed by a 2017 study by Lundsford et al, 18 different focus groups comprised of black and Hispanic respondents across four different cities found

- Most perceived themselves to be lower risk for skin cancer due to "darker skin tone" or "lack of family history"
- Most recalled family conversations around sunscreen use, but it was to prevent "darkening of skin" and "aging of skin"

Skin Protective Behaviors

Misconception & myth

Lunsford et al (2018) low risk, other conditions "more threatening", no friends or family with skin cancer history, limited skin cancer-related conversations among family friends, darker skin tone protective

Lack of patient education

No recollection of having sunburns or being warned against sun exposure, being encouraged by doctors to increase vitamin D levels through sun exposure

Lack of representation in sunscreen advertising

Common Dermatologic Presentations in Skin of Color

Keloids

Epidemiology

Keloids 15 times more common in African Americans, Hispanics, and

Asians, although seen in all races

Equally present in male and females most common in the second and third decades of life

Etiology

Acne and trauma, such as surgery, abrasions, lacerations, and piercings

Keloids

Physiology

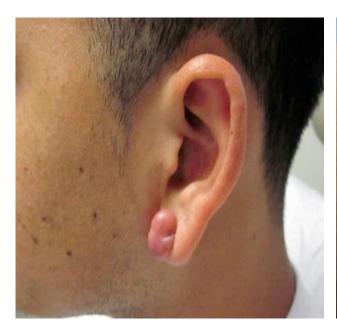
Nodular proliferation of fibroblasts that are made of thick eosinophilic hyalinized collagen fibers.

Clinical Presentation

Commonly found on the presternal area, upper arms/shoulders, earlobes, and posterior neck

Pink, skin colored or hyperpigmented lesions that are firm, defined nodules or tumors with irregular shape and shiny appearance

Common symptoms are pain, pruritus, and paresthesias that can lead to infection and ulceration









Keloids

Diagnosis

Clinical, due to biopsy leading to further growth

Treatment

Prevention of trauma to the skin

First line is intralesional corticosteroids, silicone gel

Additional treatments are radiation, laser therapy, cryotherapy, interferon and 5-fluorouracil (%-

FU) injections

Management of Keloids and Hypertrophic Scars

Epidemiology

Onset typically after puberty as an acute folliculitis and perifolliculitis that becomes chronic

Common among FST V-VI

Etiology

Shaving short, tightly curled hair -new hair growth curve back to penetrate the skin may be the precipitating factor

Use of antiepileptic drugs and treatment with cyclosporine following organ transplantation have been cited as causes of AKN

Clinical Presentation

Formation of keloid-like papules and/or plaques on the occipital scalp and posterior neck almost exclusively in darker-pigmented men with coarse, curly hair

As the disease progresses, the papules enlarge to form keloid-like plaques

Associated scarring alopecia is common in the involved scalp area







Diagnosis

Clinical

Treatment

Avoidance of the use of a razor or clippers on the edge of the occipital hairline and of tight-fitting shirts, hats, or other clothing that continuously rubs the posterior hairline is important

Having AKN predisposes a person to infection, so use of an antimicrobial soap is helpful

Patient education on avoidance of scratching the area, using cool compresses to help minimize the pruritis that can be associated with this condition

Treatment

Topical therapy - class I or II corticosteroid gel or corticosteroid gel combined with retinoic acid gel applied every night can relieve symptoms and help flatten existing lesions; shampoos including salicylic acid, selenium sulfide, ketoconazole

Treatment of Acne Keloidalis Nuchae: A Systemic Review of the Literature

Eric L. Maranda, Brian J. Simmons, Austin G. Nguyen, Victoria M. Lim, & Jonette E. Keri Dermatology and Therapy. 2016;(6):363-378

Traction Alopecia

Epidemiology

Traction alopecia commonly diagnosed in African American women and patients of color

Etiology

Tension from chronic use of tight hairstyles, ponytails, tight braids, hair weaves, hair rollers, heat at the roots, and chemically relaxed hair







Traction Alopecia

Clinical Presentation

Hair loss commonly found around the front frontal and temporal hairline

Treatment

Advise patient to discontinue and give alternatives to hairstyle causing tension

Hair growth may improve with topical steroids/minoxidil, oral minoxidil/abx (ie. doxycycline), intralesional corticosteroid injections for patients who do not have fibrosis

Contrast Visual Presentation Across Skin Types

Melasma

Epidemiology

Affects more than 5 million people in the United States Predominantly affects women of Latino, African, Native American, and Asian descent Mean age of diagnosis is 34 years old, often years after the last pregnancy

Clinical Presentation

Fitzpatrick skin types III and IV are most commonly affected

Symmetric, irregular lesions of *centrofacial and malar regions are most common*, which can aid in distinguishing from other hyperpigmentation disorders, but it can present in mandibular region

Melasma

Diagnosis

Clinically with light tan to grayish-brown macules

Wood's lamp examination are helpful

Treatment

Minimizing UV exposure (protective clothing, hats, sunblock with protective factor 30)

First-line therapies are topical agents aimed at skin lightening, sun protection, and camouflage. Second-line therapies include chemical peels, light-based therapies, and lasers







Melasma

CC-BY images
Lieu, T.J., Pandya, A.G. (2014). Melasma. In: Jackson-Richards, D., Pandya, A. (eds) Dermatology Atlas for Skin of Color. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-54446-0_6

Psoriasis

Epidemiology

Prevalence is lower in skin of color and highest in Caucasians 3.7%, African Americans 2%,

Hispanics 1.6%

Immune-mediated chronic skin disease commonly diagnosed in young adults ages 20-30 years old and middle age 50-60 years old

60% of this condition present as plaque psoriasis

Clinical Presentation

Skin of color present with more brown or violet lesions, that are scalier, thicker and covers larger body surface area for patients of African descent

Pigmentation can present as both hyper- and hypopigmentation





Psoriasis

CC-BY images
Mallawaarachchi, K. (2021). Psoriasis. In: Ranawaka, R.R., Kannangara, A.P., Karawita, A. (eds) Atlas of Dermatoses in Pigmented Skin. Springer, Singapore. https://doi.org/10.1007/978-981-15-5483-4_5

Psoriasis

Fitzpatrick I - III presentation

Sharply defined erythematous or salmon-colored plaque with silvery scaling



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Mallawaarachchi, K. (2021). Psoriasis. In: Ranawaka, R.R., Kannangara, A.P., Karawita, A. (eds) Atlas of
Dermatoses in Pigmented Skin. Springer, Singapore. https://doi.org/10.1007/978-981-15-5483-4_5

Psoriasis

Diagnosis

Clinical

Biopsy if one or few plaques to r/o SCC in situ

Treatment

First-line therapy topical steroids, topical vitamin D, topical retinoids, and topical calcineurin inhibitors

Non-topical treatment: phototherapy, oral immunosuppressants, systemic retinoids, biologic medication

Seborrheic Dermatitis

Epidemiology

A top 10 reason for dermatology visits in AA, Asians and Pacific Islanders A chronic inflammatory skin disorders affects areas with high sebum production of triglycerides and cholesterol

Clinical Presentation

Diffuse fine, white or greasy scales on the scalp with severe disease presenting with pruritus and erythematous scaly plaques that may extend to the forehead

Facial lesions present symmetrically and commonly hypopigmentation on skin of color







Seborrheic Dermatitis

Diagnosis

Clinical

Biopsy if one or few plaques to r/o SCC in situ

Treatment

Ketoconazole 2% twice a week x 4 weeks and then weekly for maintenance Topical corticosteroid (ie betamethasone) with an emollient (ie ointments) is cosmetically acceptable for people of color

Post-Inflammatory Hyperpigmentation

Epidemiology

Skin of color have longer duration (Fitzpatrick skin type IV-VI)

3rd most common reason for AA derm visits

Most common cause is acne, but can happen in inflammatory conditions like allergic reactions, papulosquamous disease, infections, and burns

Physiology

Damage to basal keratinocytes leading to an increase in melanin release into the dermis and engulfed by macrophages which presents as blue-gray color on the skin.

More melanin is made by melanocytes, which transfer to keratinocytes due to the epidermis responding to inflammatory response.

Post-Inflammatory Hyperpigmentation

Clinical Presentation

Macules or patches that are well-demarcated tan or light brown for superficial melanin deposits, while deeper melanin deposits are poorly circumcised with dark brown to blue-gray appearance in the area of inflammation and injury



CC-BY image
Savory, S.A., Pandya, A.G. (2014). Post-inflammatory Hyperpigmentation. In: Jackson-Richards, D., Pandya, A. (eds)
Dermatology Atlas for Skin of Color. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-54446-0_5

Post-Inflammatory Hyperpigmentation

Diagnosis

Clinical

Treatment

Controlling the underlying cause, sunscreen and sun protective clothing

Hydroquinone alone or in combination with a mild corticosteroid and/or

keratolytic (ie. tretinoin)

Other treatments include azelaic acid, kojic acid, vitamin E, vitamin C, arbutin, bearberry extract, benzoquinone, chemical peels, laser

Social Determinants of Health - Improving Upstream Factors

Social Determinants of Health

- Social constructs of race and colorism
- Lack of diversity in academia faculty & medical practioners
- ☐ Limited academic resources of visual illustrations
- Limited curriculum on skin of color in academic institutions
- Limited resources available to improve the pathway for historically marginalized populations in medicine
- Access to diverse and equitable providers
- ☐ Cultural perceptions of patients and providers
- Insurance coverage for dermatological treatment



Representation of Skin of Color in Dermatology

When looking at medical curriculum or educational resources it is important to look at:

Distribution of images to evaluate the representation of skin of color (Fitzpatrick IV - VI)

Conditions that have a disproportionate lack of representation

Conversely, which disease processes are overrepresented by SOC

Academic Representation of Skin Type in Dermatology

Louie and Wikes 2018 article "Representations of race and skin tone in medical textbook imagery"

Explored theory that medical curriculum was one of many contributing factors to healthcare inequities

The question they asked, is race and skin tone depicted in medical textbooks reflective of the diversity of the U.S. (4 common books)

Academic Representation of Skin Type in Dermatology

4146 images analyzed by textbook, chapter, and topic level from:

- Atlas of Human Anatomy
- ☐ Bates' Guide to Physical examination & History Taking
- Clinically Oriented Anatomy
- ☐ Gray's Anatomy for Students

Academic Representation of Skin Type in Dermatology (update slide - positive direction)

Findings suggest racial inequities within curriculum due to disproportionate representation for skin of color at chapter and subject level

- ☐ 74.5% light skin tone
- □ 21% medium skin tone
- ☐ 4.5% dark skin tone

Current Times: Same Recognition Barriers



Article in May 2020,
"Absence of images of skin
of colour in publications of
COVID-19 skin
manifestations"



Study looked at articles published between Dec 3, 2019, and May 3, 2020



36 articles included photos of COVID cutaneous findings, 130 images

92% (120/130) showed FST I-III 6% (7/130) showed FST IV 2% (3/130) could not be categorized due to being acral skin

Current Times: Same Recognition Barriers

- ☐ Article below span of 2 months, 716 cases of new-onset dermatologic manifestations of confirmed/suspected COVID-19 were entered into an international registry
- □ Various professions dermatologists (54%), other physicians (32%), PA/NP (7.3%), RN (2.8%), other medical professionals (3.4%)
- ☐ Cases were reported from 31 countries, most (89%) from the United States
- ☐ Of those 716 images, 34 were Hispanic patients and 13 Black/African American

J Am Acad Dermatol. 2020 Oct; 83(4): 1118-1129.

The spectrum of COVID-19–associated dermatologic manifestations: An international registry of 716 patients from 31 countries

What Can We Do?

Expand your line of sight

Expand your self-directed learning

Evaluate medical curricula and clinic resources for inclusion - images, use of mannequins and diversity of teaching faculty/providers

Establish partnerships with organizations providing care in underserved and under resourced areas

Physical Exam on Skin of Color

Take a thorough history
Use natural light to inspect people of color; other lights can make the skin appear bluish
which makes it harder to see skin changes.
Avoid wearing gloves because it diminishes skin temperature and texture changes
First examine non-injured skin; ask the patient or guardian to point out areas of normal
skin, temperature and texture
Examine oral cavities (ie. lips and tongue) when concerned for hypoxia; areas will appear
grayish-white color
Examine areas with least amount of pigment including palms, soles, tongue, palate, oral
mucosa, conjunctive, sclera and nail beds
Article resource: https://www.myamericannurse.com/color-awareness-a-must-for-
patient-assessment/

Patient Education Practices (importance of history taking)

Advise monthly self skin exams, especially for those with a history of skin cancer and multiple nevi

Educate patients that skin of color is at risk for developing skin cancer

Recommend annual skin physical exams and exams with dermatology specialist

Educate patients to document and monitor skin changes for cutaneous dyspigmented lesions, including on the mucosal, palmar, plantar, interdigital spaces, and subungual

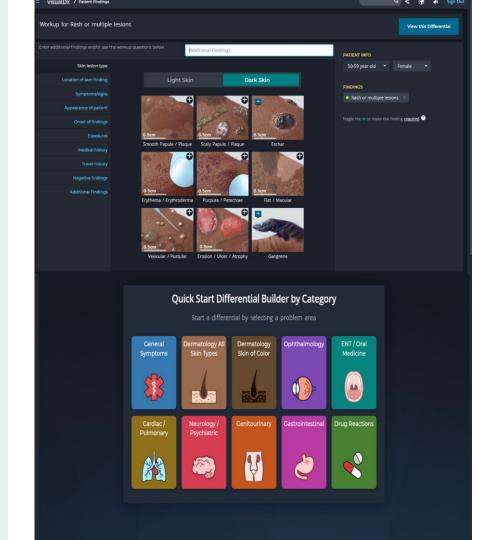
Encourage participation in research studies

(ie. All of Us Research Program:

https://allofus.nih.gov/)

Resources - VisualDx

https://www.visualdx.com/



Resources

From makers of Visual Dx -

Aysa App Available on Apple & Android



Mind the Gap
Free PDF download

https://www.blackandbrownskin.co.uk/mindthegap



Resources

Skin of Color Society

https://skinofcolorsociety.org/



Dr. Augh website - 2 free book downloads

https://www.crystalaguhmd.com/downloadcurlyhairebook



The Vaseline Healing Project

Patients

Connect patients with providers through a partnership with Hued

Hued a platform that diversifies the patient/doctor connection by connecting patients (of color) with health and medical professionals (of color) that specifically understand their cultural, physical and mental needs

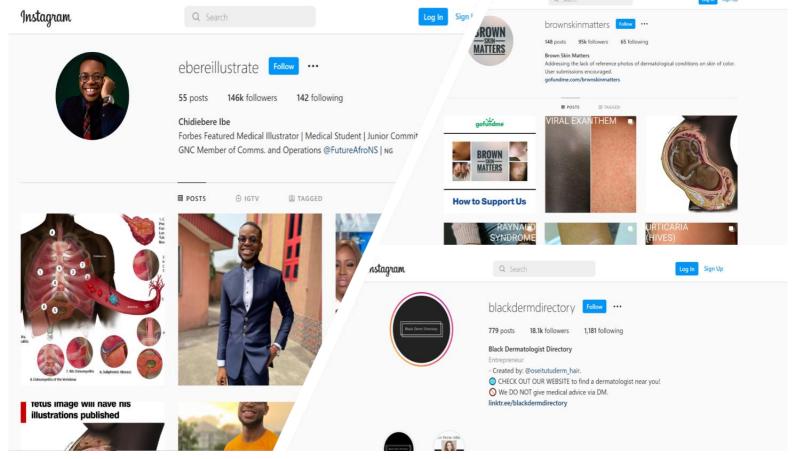
Connect patient with clinic resources

Links to National Association of Free & Equitable clinics

Provider

8 education YouTube videos

https://www.vaseline.com/us/en/healing-project.html



Social Media Platforms

Text Books

- ☐ Taylor & Kelly's Dermatology for Skin of Color
- ☐ Dermatology Atlas for Skin of Color
- ☐ Atlas of Dermatoses in Pigmented Skin
- ☐ The Full Spectrum of Dermatology: A Diverse and Inclusive Atlas
- ☐ Dr. Chidiebere Ibe Beyond Skin: Why Representation Matters in Medicine
- ☐ Many more listed on website for Skin of Color Society

References

- 1. Buster, K., Ezenwa, E. (2019). Health disparities and skin cancer in people of color. *Practical Dermatology*, Vol 16 (4), 38-42. https://practicaldermatology.com/articles/2019-apr/health-disparities-and-skin-cancer-in-people-of-color
- 2. Currimbhoy S., Srivastava D. (2014) Melanoma. In Dermatology Atlas for Skin of Color. Springer. doi: 10.1007/978-3-642-54446-0
- 3. Daneshjou R, Rana J, Dickman M, Yost JM, Chiou A, Ko J. (2020). Pernio-like eruption associated with COVID-19 in skin of color. JAAD, 6(9):892-897. doi: 10.1016/i.idcr.2020.07.009
- 4. Jackson-Richards, D., Pandya, A. G. (2014). *Dermatology atlas for skin of color*. Springer. doi: 10.1007/978-3-642-54446-0
- 5. Kundu, R. V., Patterson, S. (2013). Dermatologic conditions in skin of color: Part I. Special considerations for common skin disorders. *American Family Physician*, 87 (12): 850-856. https://www.aafp.org/afp/2013/0615/p850.html
- 6. Lester, J. C., Jia, J. L., Zhang, L., Okoye, G. A., Linos, E. (2020). Absence of images of skin of colour in publications of COVID-19 skin manifestations. *British Journal of Dermatology*, 183, 593-595. doi: 10.1111/bjd.19258
- 7. Buchanan Lunsford, N., Berktold, J., Holman, D. M., Stein, K., Prempeh, A., & Yerkes, A. (2018). Skin cancer knowledge, awareness, beliefs and preventive behaviors among black and hispanic men and women. *Preventive Medicine Reports*, 12, 203–209. https://doi.org/10.1016/j.pmedr.2018.09.017

References

- 1. Louie P, Wilkes R. Representations of race and skin tone in medical textbook imagery. (2018). *Soc Sci Med*, 202:38-42. doi: 10.1016/j.socscimed.2018.02.023
- 2. Moiin, A. (2020). Atlas of black skin. Springer. https://doi.org/10.1007/978-3-030-31485-9
- 3. Pusey-Reid, E., Quinn, L., Samost, M., Reidy, P. Skin Assessment in Patients with Dark Skin Tone. (2023) *AJN, American Journal of Nursing* 123(3):p 36-43. DOI: 10.1097/01.NAJ.0000921800.61980.7e
- 4. Raffi, J., Suresh, R., Agbai, O. Clinical recognition and management of alopecia in women of color. (2019) *Int J Womens Dermatol*, 5(5):314-319. doi: 10.1016/j.ijwd.2019.08.005.
- 5. Rananaka, RR., Kannangara, AP, Karawith, A. (2021). Atlas of Dermatoses in Pigmented Skin. Springer. doi: 10.1007/978-981-15-5483-4
- 6. Taylor, S. C, Kelly, A. P., Lim, H., Serrano, A. M. (2016). Dermatology for Skin of Color. ISBN-13: 978-0071805520
- 7. Wadyka, S. (2024, February 2). *Sun Safety Tips for the Entire Family*. Consumer Reports. https://www.consumerreports.org/health/sun-protection/sun-safety-tips-for-the-entire-family-a7948562866/#:~:text=More%20than%20one%20in%204,they're%20in%20the%20sun.

Thank you!

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Questions & Discussion