Tips and Tricks for Treating Your Patients of Color: AD, Acne, and More

Mercedes E Gonzalez, MD, FAAD
Medical Director, Pediatric Dermatology of Miami
Pediatric Skin Research, LLC

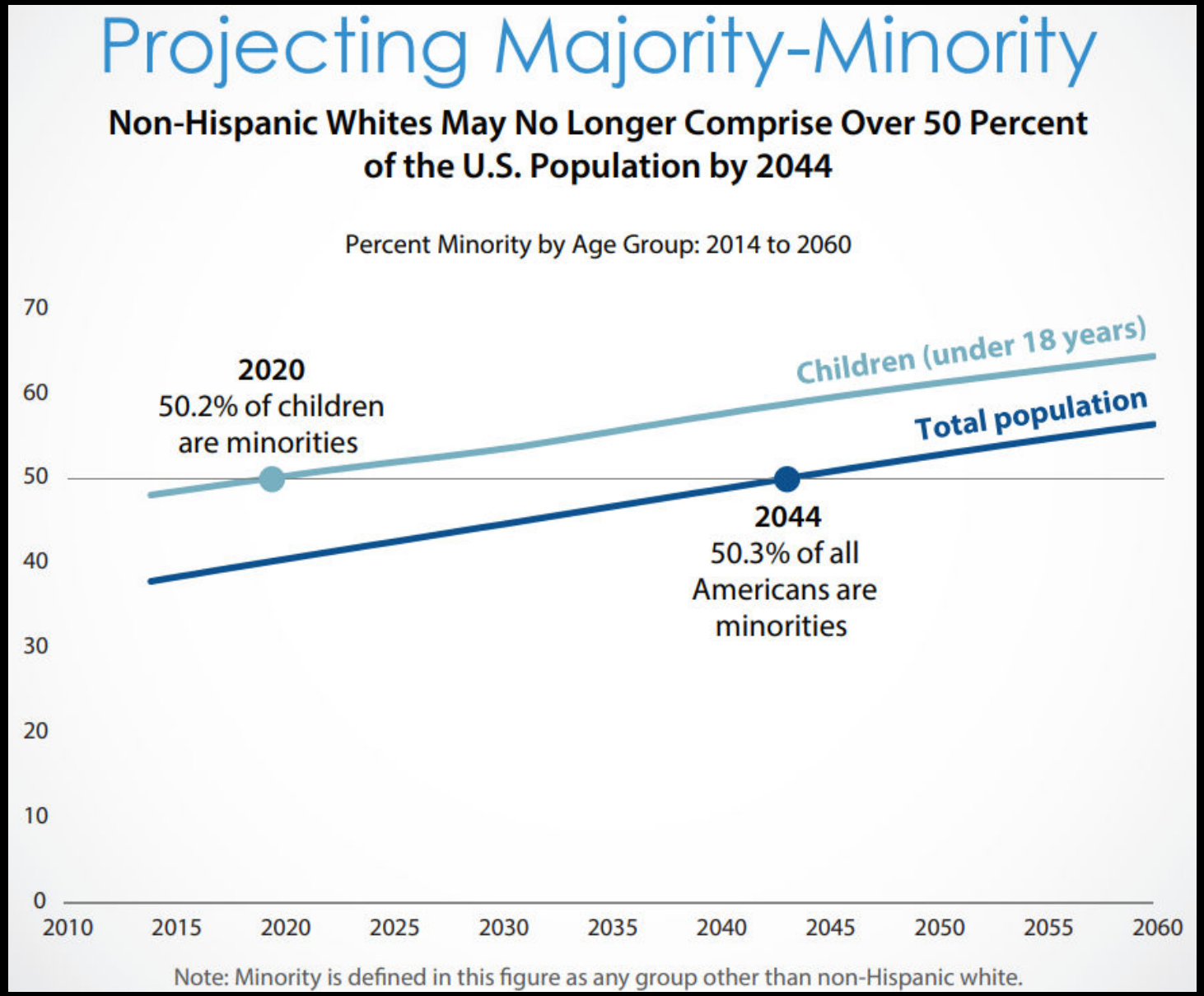
Friday, February 7, 2025
4:50 pm

Disclosures

Speaker & Investigator	Abbvie, Arcutis Dermavant, Ely Lilly Krystal Biotech Pfizer Regeneron Pharmaceuticals Sanofi Genzyme Verrica Pharmaceuticals
Investigator	Amgen, Anterogen, Incyte Neilsen Biosciences, Novartis
Consultant & Advisory board	Abeona, Alphyn, Amyrt, Arcutis Cerave, Dermavant, Ely Lilly, Incyte, Noblepharma, Regeneron, Sanofi, Unilever, Inc Verrica Pharmceuticals

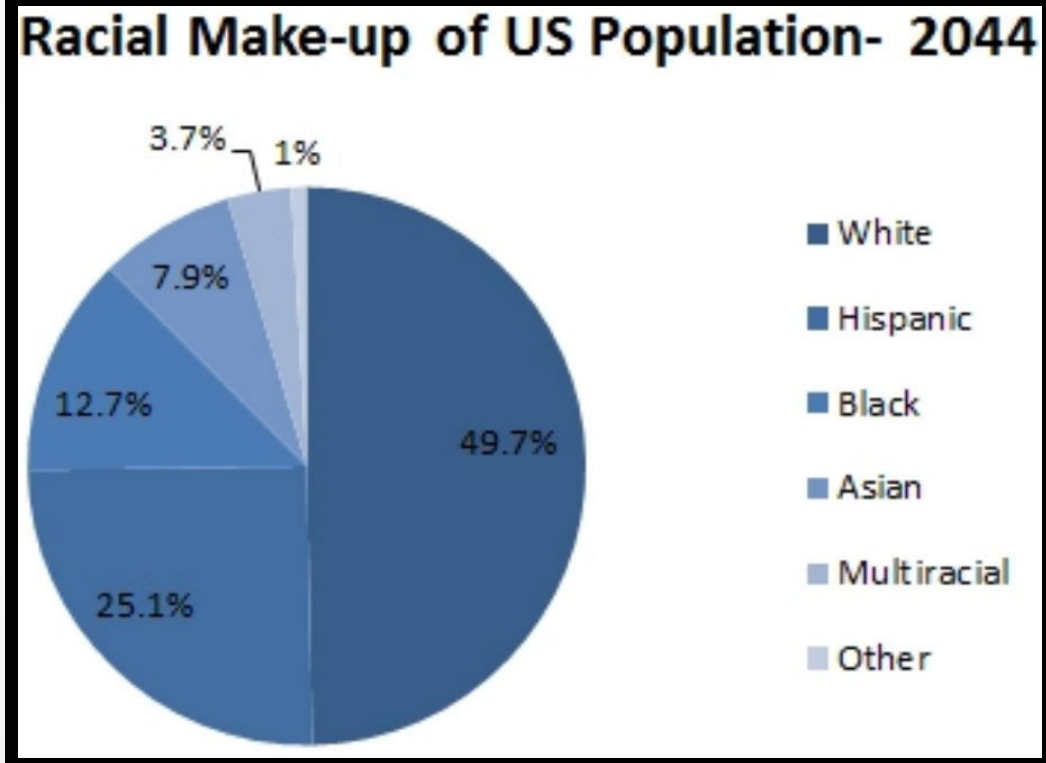
Off label uses of medications will be discussed

US Population Majority- Minority by 2044



90% of population growth driven by skin of color

SOC is the majority not the minority



https://www.census.gov/content/dam/Census/newsroom/releases/2015/cb15-tps16_graphic.pdf

Skin of color

FIGURE 1. The colors of the skin in Latin America.

White, European descendant

White, Mediterranean or Levantine descendant

Olive, Mixed ("Mestizo") European + Indigenous descendant

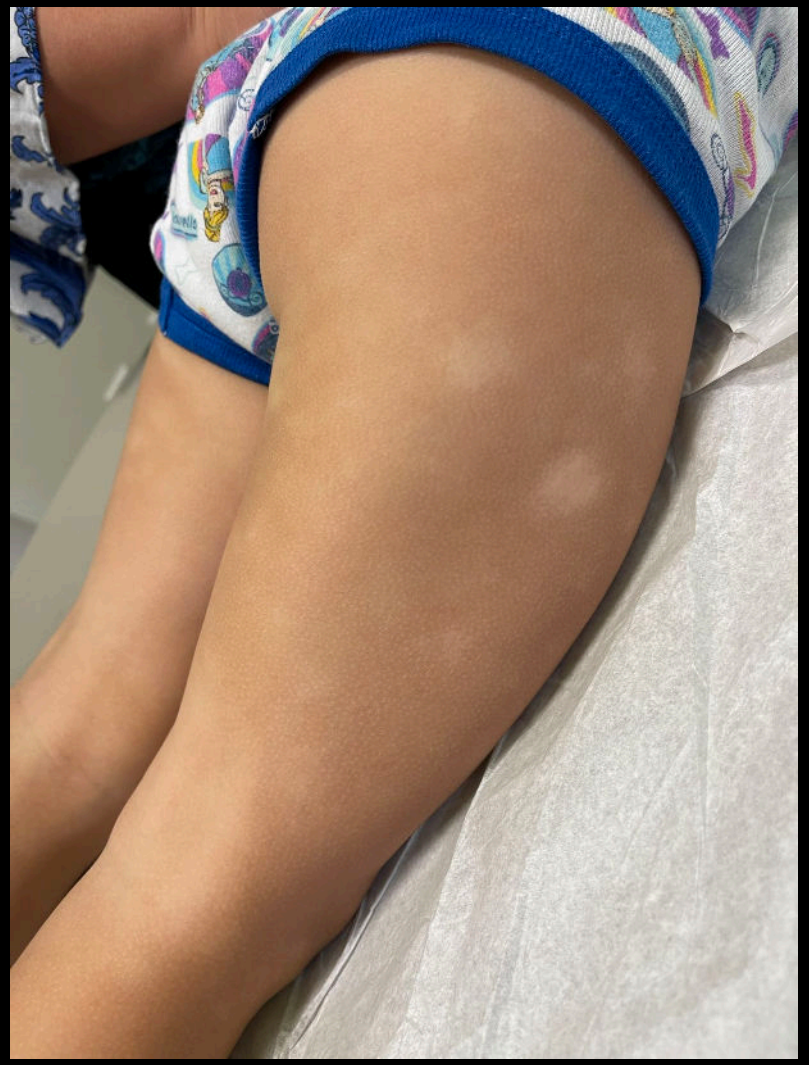
Yellow, Mixed with Asian descendant

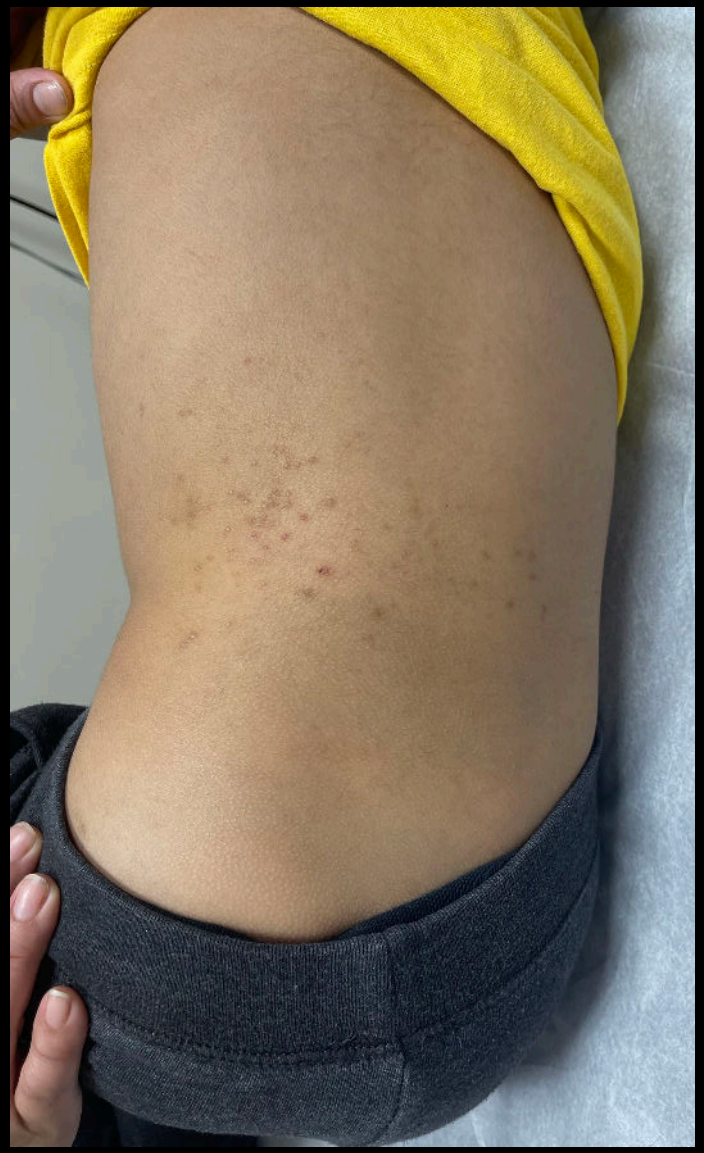
Light Brown/Yellowish: Indigenous

Medium brown, Mixed (Mulatto) European + African descendant

Dark brown, African descendant

Florez-White M. J Drugs Dermatol 18(3):2019





Post-inflammatory pigment alteration is the complaint

Most common pediatric skin conditions by race/ethnicity

TABLE 1 Most common diagnoses in children <15 y of age

	White (N = 892)	% (95% CI)	Black (N = 104)	% (95% CI)	Asian (N = 47)	% (95% CI)	Hispanic (N = 89)	% (95% CI)
1	Acne	26.2 (21.8-31.1)	Atopic dermatitis	30.5 (19.4-44.5)	Acne	25.8 (15.3-40.2)[a]	Warts	21.6 (12.5-34.7)[a]
2	Warts	23.8 (20.4-27.6)	Dermatophytosis	20.7 (12.6-32.1)[a]	Dermatitis	17.6 (6.5-39.7)[a]	Acne	20.8 (12.1-33.5)[a]
3	Benign neoplasm	13.1 (10.4-16.3)	Dermatitis	11.8 (6.7-20.1)[a]	Atopic dermatitis	10.9 (4.5-24.2)[a]	Benign neoplasm	15.2 (8.5-25.8)[a]
4	Molluscum	9.7 (7.4-12.7)	Acne	9.9 (5.0-18.9)[a]	Benign neoplasm	9.9 (3.7-23.8)[a]	Atopic dermatitis	11.9 (5.6-23.4)[a]
5	Dermatitis	9.4 (7.2-12.2)	Seborrheic dermatitis	7.3 (3.3-15.5)[a]	Warts	8.7 (3.0-22.8)[a]	Molluscum	7.5 (2.7-18.7)[a]
6	Atopic dermatitis	6.4 (4.7-8.5)	Impetigo	6.3 (2.3-16.3)[a]	Disorder of pigmentation	6.9 (1.7-23.9)[a]	Seborrheic dermatitis	4.5 (1.0-18.6)[a]
7	Other specified anomalies of skin	2.8 (1.3-6.0)[a]	Disorder of pigmentation	4.7 (1.4-14.2)[a]	Diseases of lips	6.9 (1.0-35.8)[a]	Alopecia areata	4.4 (0.9-18.4)[a]
8	Disorder of pigmentation	2.7 (1.8-4.2)	Alopecia, other or unspecified	4.1 (0.9-16.9)[a]	Cysts	4.5 (0.7-24.2)[a]	Vitiligo	3.8 (1.2-11.1)[a]
9	Psoriasis	2.4 (1.5-4.1)[a]	Alopecia areata	4.0 (0.9-17.1)[a]	Molluscum	4.2 (1.0-15.9)[a]	Dermatitis	3.7 (1.2-10.6)[a]
10	Other disorders of skin	2.0 (1.0-3.9)[a]	Other disorders of skin	3.4 (0.9-11.4)[a]	Urticaria	4.2 (1.0-15.6)[a]	Disorder of pigmentation	3.2 (0.9-10.2)[a]

Ho T, et al. *Pediatric Dermatology.* 2021;38(Suppl. 2):129–131

Most common pediatric skin conditions by race/ethnicity

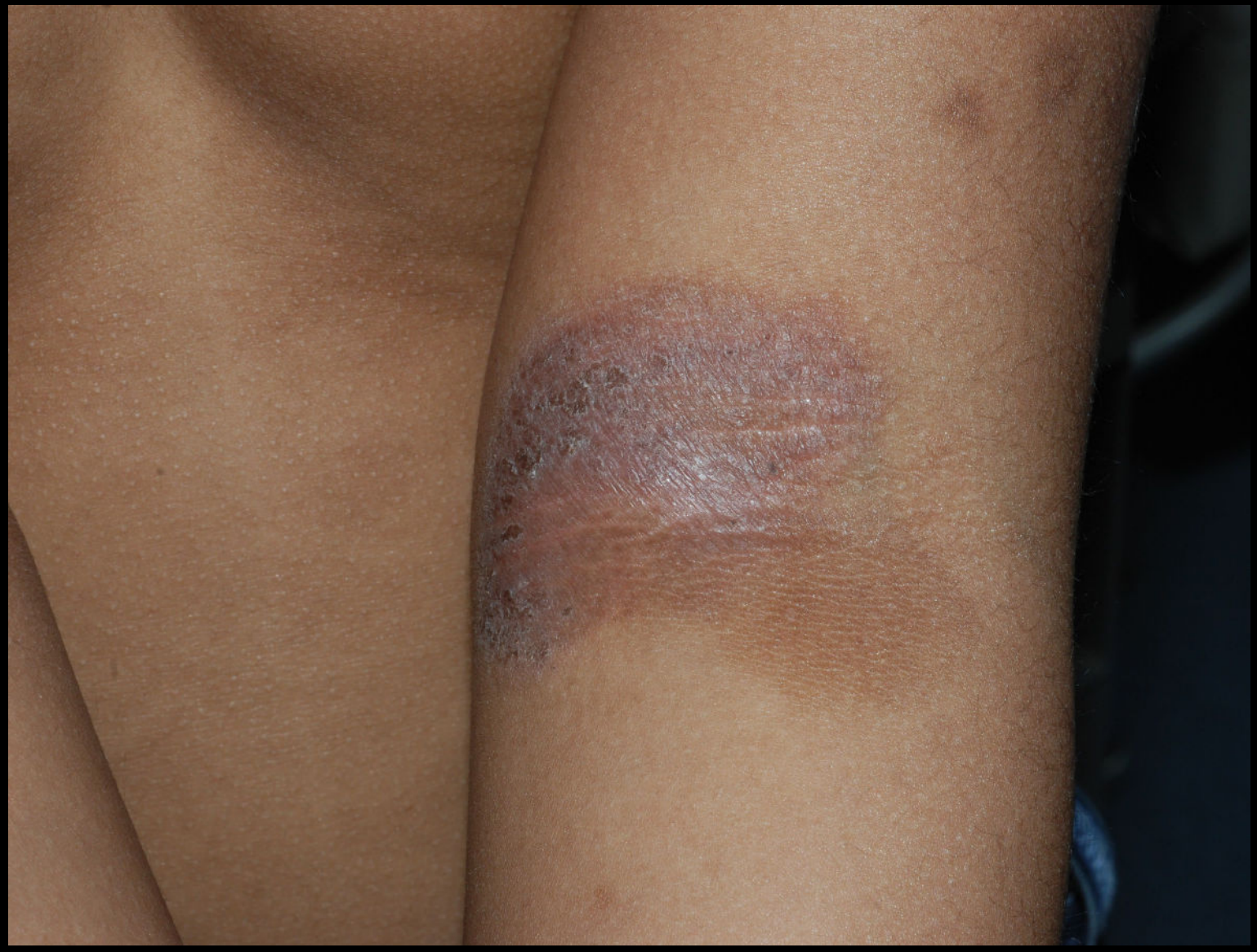
TABLE 2 Most common diagnoses in youth from 15 to 24 years of age

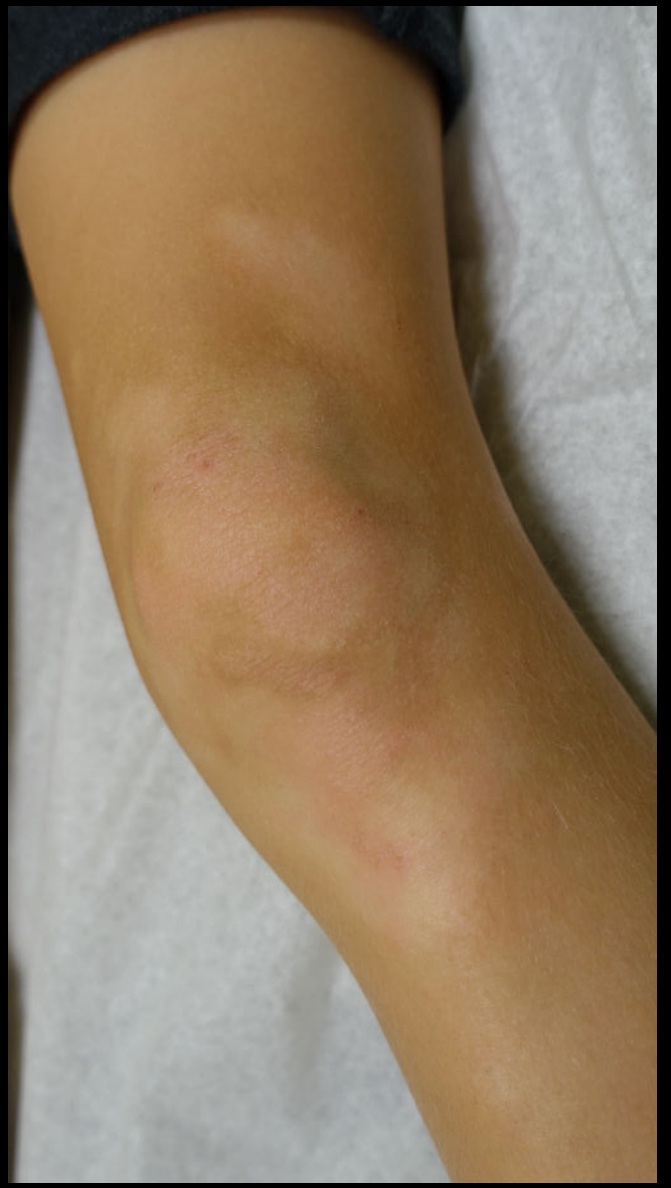
	White (N = 1539)	% (95% CI)	Black (N = 84)	% (95% CI)	Asian (N = 61)	% (95% CI)	Hispanic (N = 142)	% (95% CI)
1	Acne	60.4 (56.8-64.0)	Acne	45.8 (33.3-58.8)	Acne	50.5 (34.6-66.2)	Acne	67.3 (57.6-75.7)
2	Benign neoplasm	10.9 (9.0-13.3)	Scars and keloids	13.2 (6.7-24.2)[a]	Disorder of pigmentation	10.8 (4.2-25.3)[a]	Disorder of pigmentation	6.9 (3.1-14.7)[a]
3	Warts	9.6 (7.8-11.7)	Disorder of pigmentation	9.6 (3.7-22.6)[a]	Vitiligo	8.7 (1.4-39.5)[a]	Benign neoplasm	5.7 (2.6-12.2)[a]
4	Dermatitis	5.4 (4.2-7.0)	Benign neoplasm	6.1 (1.9-18.2)[a]	Warts	8.2 (3.0-20.3)[a]	Atopic dermatitis	4.8 (2.1-10.7)[a]
5	Cysts	2.9 (1.9-4.4)	Diseases of hair and hair follicles	6.1 (1.5-21.5)[a]	Dermatitis	8.0 (2.7-21.6)[a]	Dermatitis	4.5 (2.0-9.8)[a]
6	Scars and keloids	2.4 (1.6-3.4)	Cysts	5.8 (1.4-21.5)[a]	Benign neoplasm	6.1 (1.7-19.9)[a]	Warts	4.0 (1.6-9.5)[a]
7	Disorder of pigmentation	2.3 (1.5-3.5)	Dermatitis	5.5 (1.8-15.5)[a]	Atopic dermatitis	4.4 (0.8-21.6)[a]	Psoriasis	4.0 (1.5-9.8)[a]
8	Psoriasis	2.3 (1.4-3.6)	Psoriasis	5.2 (1.4-18.0)[a]	Alopecia areata	3.6 (0.5-20.5)[a]	Other disorders of skin	3.5 (1.2-10.2)[a]
9	Diseases of hair and hair follicles	2.3 (0.9-5.9)[a]	Seborrheic dermatitis	4.2 (1.2-13.9)[a]	Non-pressure chronic ulcer of skin	3.4 (0.5-21.0)[a]	Scars and keloids	3.3 (1.3-7.8)[a]
10	Other disorders of skin	2.0 (1.3-3.2)[a]	Lichen planus	4.2 (0.7-22.9)[a]	Seborheic keratosis	2.3 (0.3-15.1)[a]	Cysts	2.3 (0.6-8.4)[a]

[a]Estimates may be less accurate due to low number of encounters (fewer than 30 encounters).

Ho T, et al. *Pediatric Dermatology.* 2021;38(Suppl. 2):129–131

Post-inflammatory pigment alteration secondary to atopic dermatitis





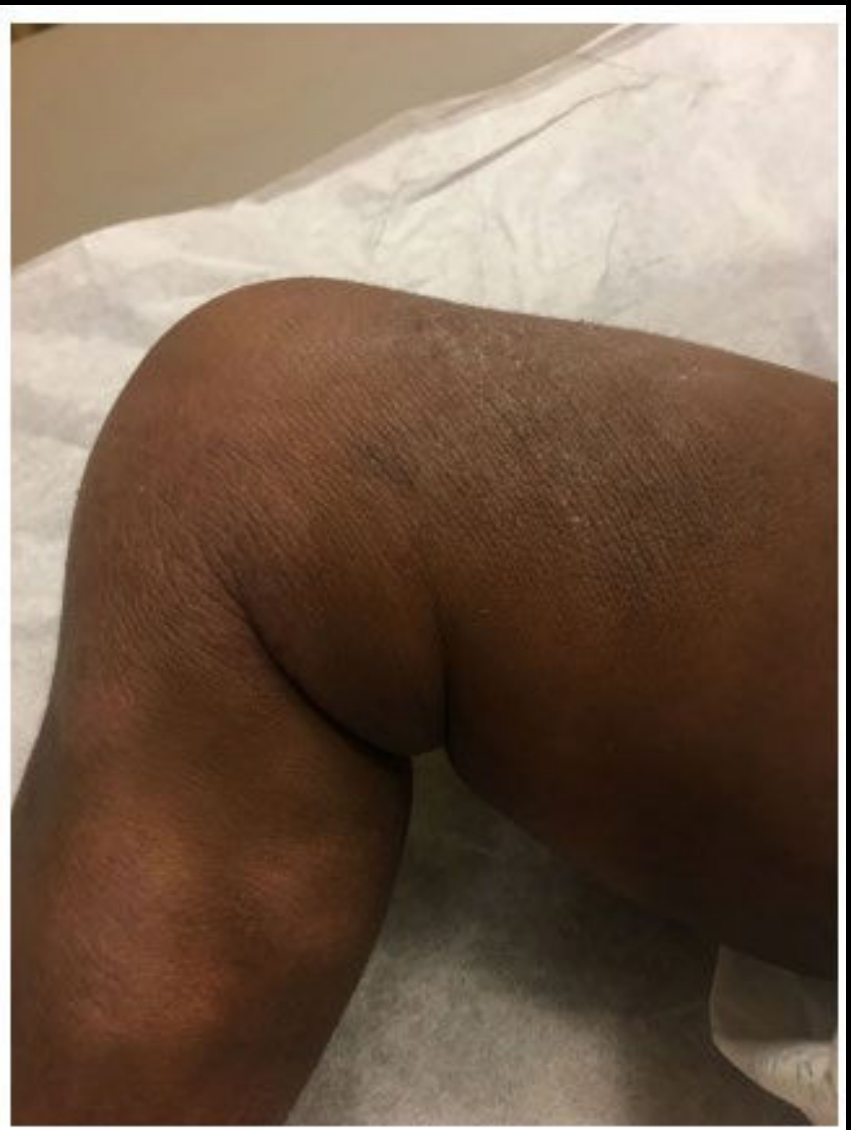
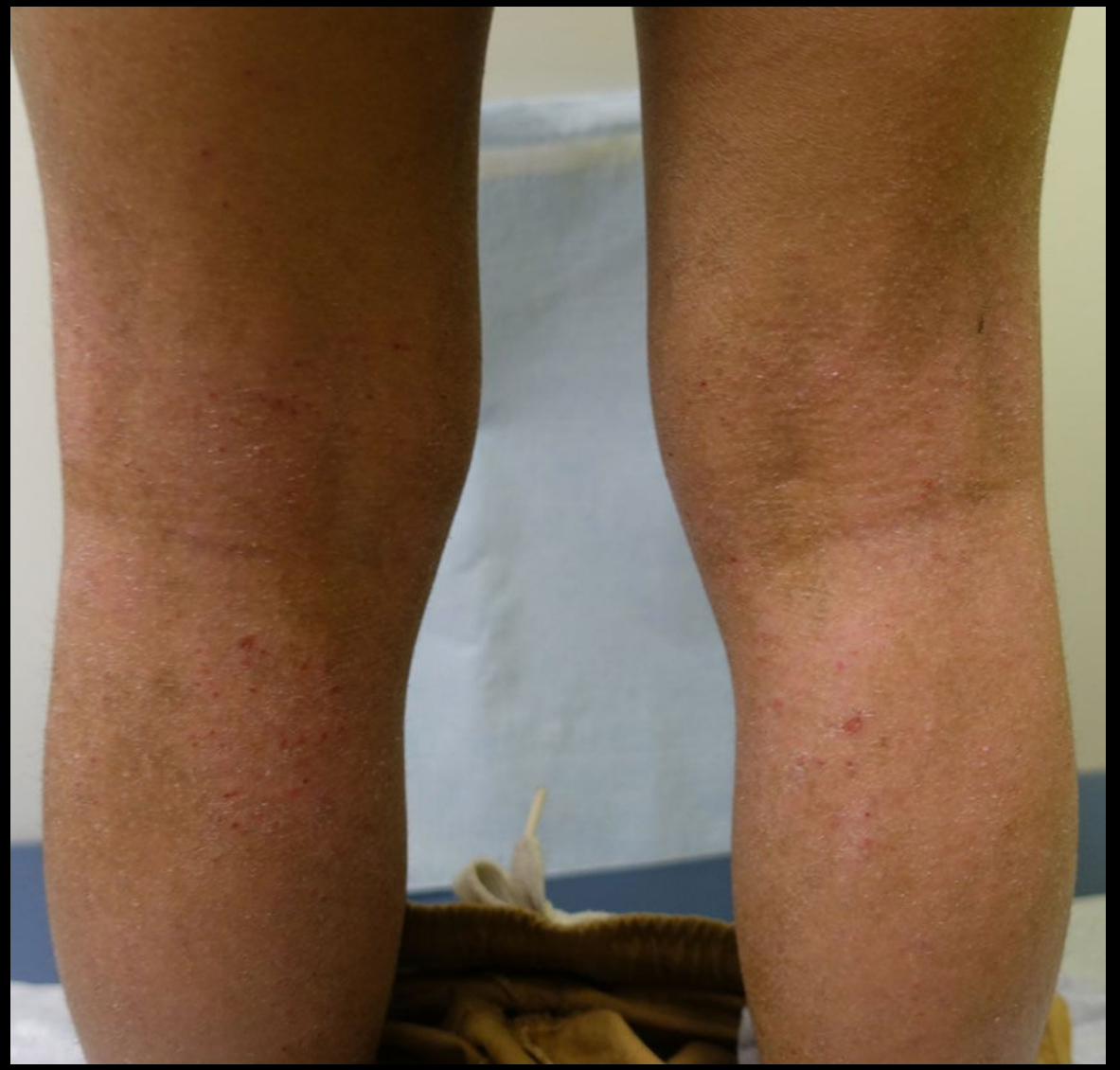
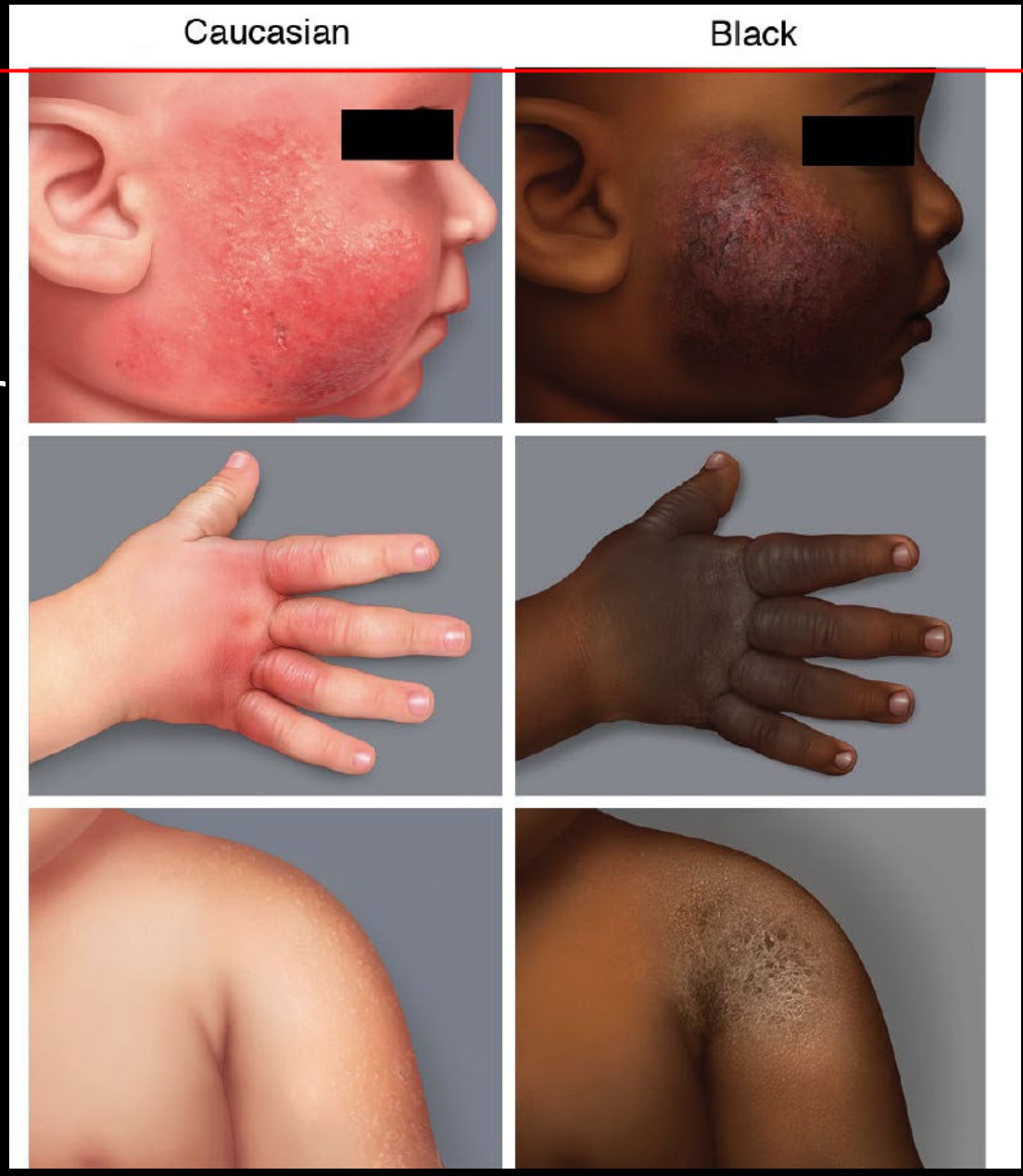


FIGURE 1 Hyperpigmentation of the thigh, lichenified plaques with notable absence of erythema, and hypopigmentation of the calves because of untreated atopic dermatitis in a Black infant



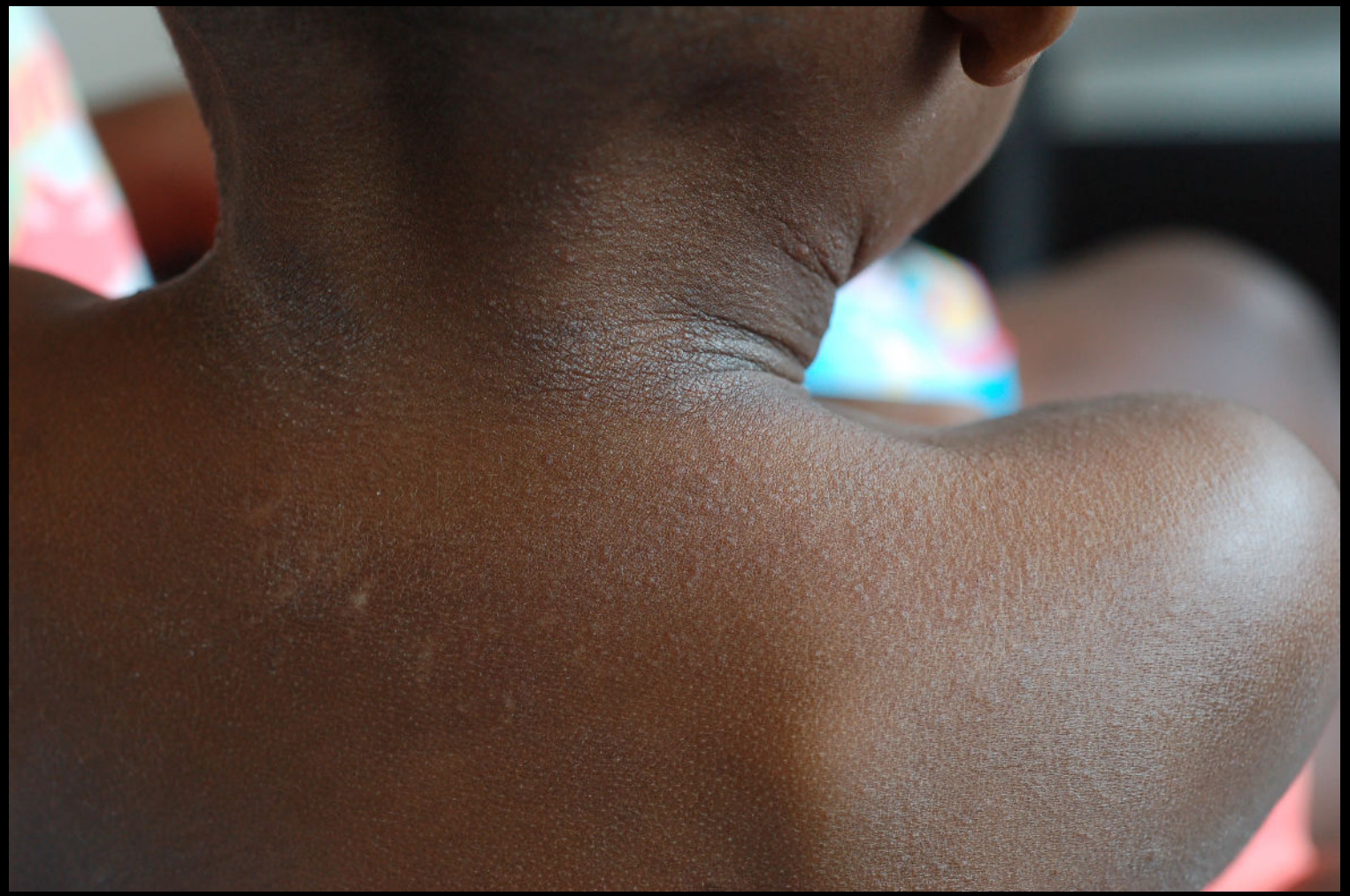
Atopic Dermatitis Distinguishing features in SOC

- Erythema is often less prominent even in severe disease
- Lesions may appear reddish-brown, violaceous, gray, or deeply pigmented (hyperchromic) rather than bright red
- Can be easily missed if mild or localized
- Underestimation of severity of AD in SOC
  - PO-SCORAD adapted for black skin in Europe
    - Focuses on objective signs such as erythema and lichenification



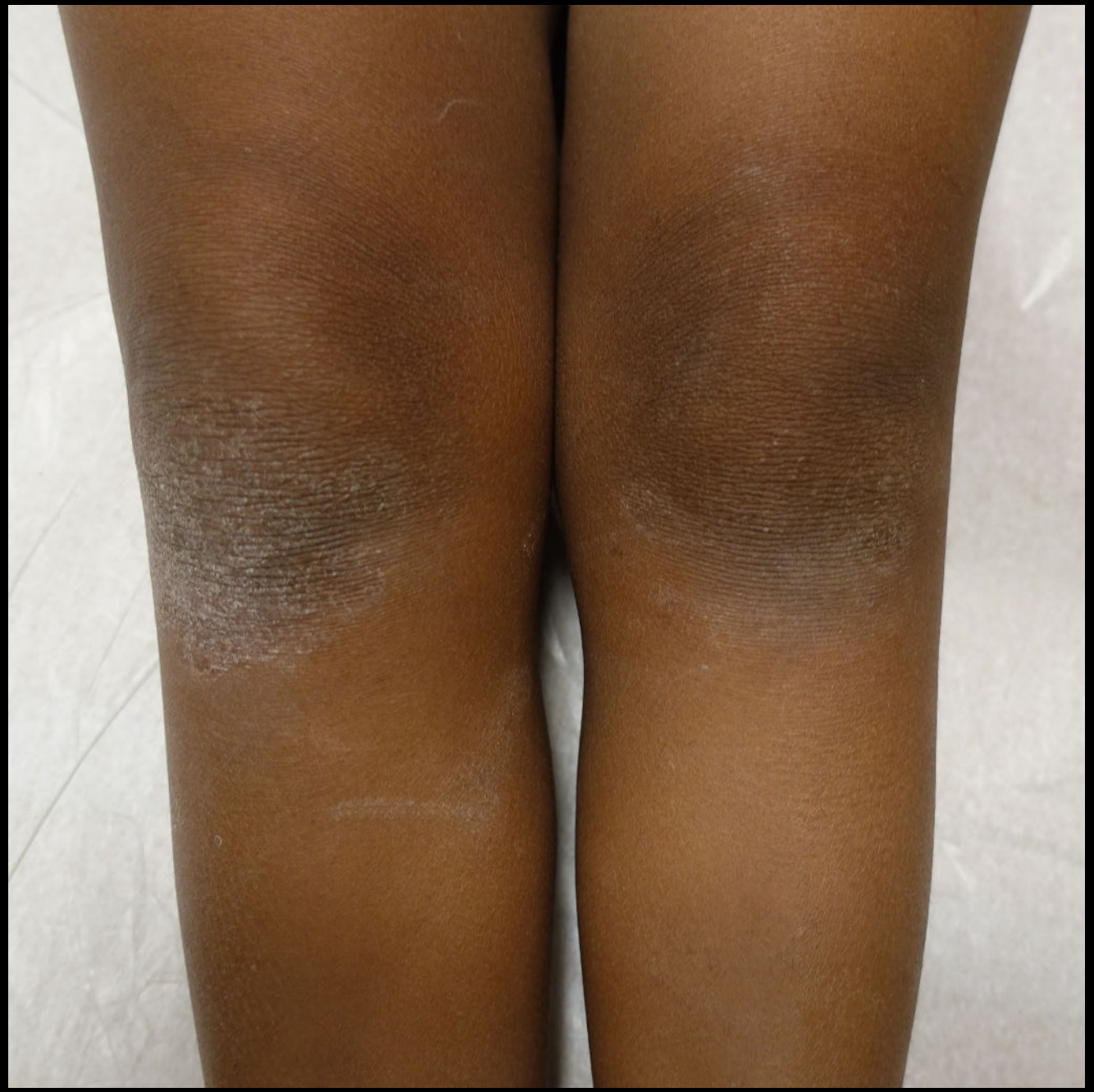
Ben-Gashir MA, Hay RJ. Br J Dermatol. 2002;147:920-925.
Faye O et al. *J Eur Acad Dermatol Venereol.* 2020;34:795-799.

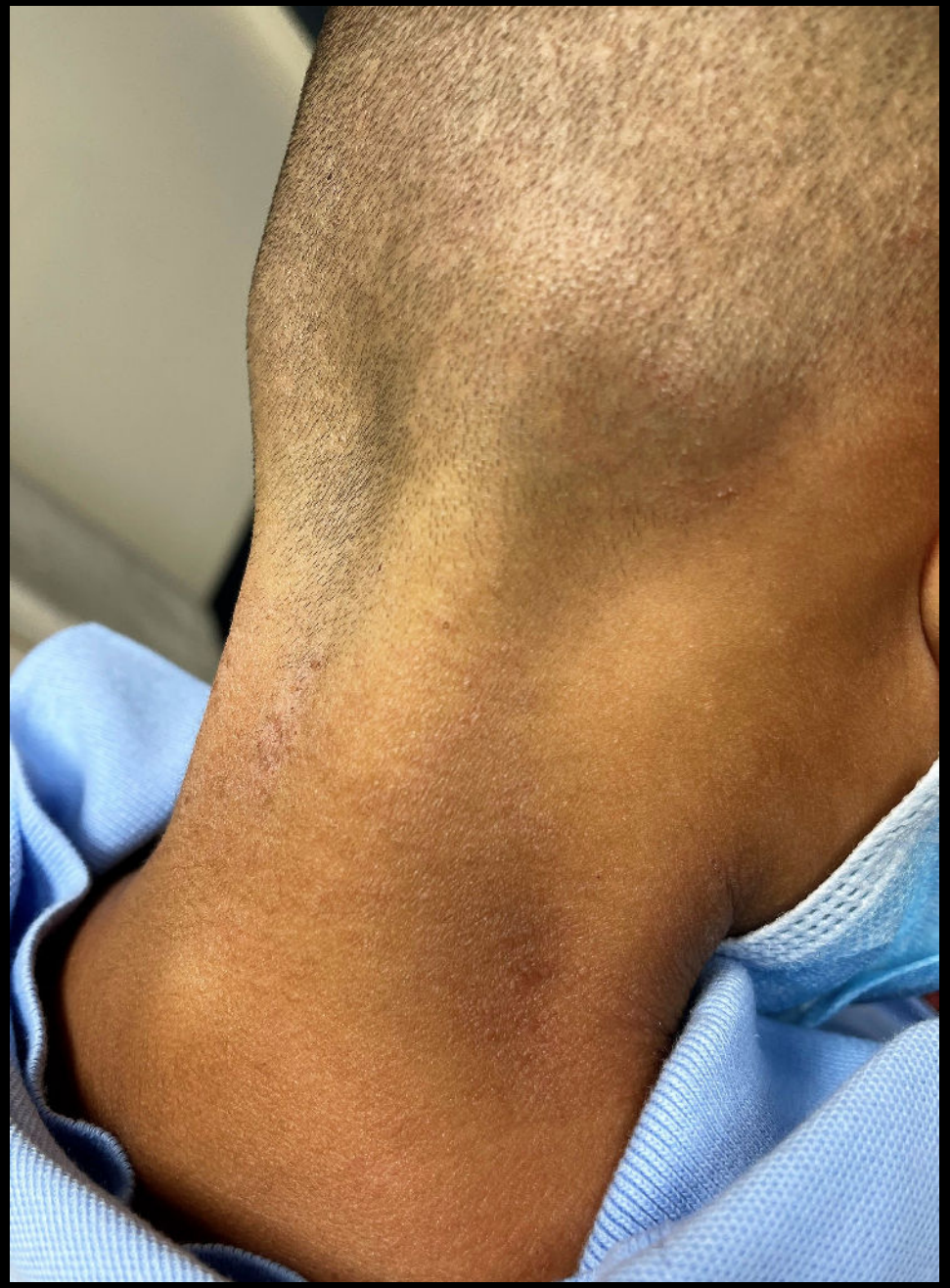
Atopic Dermatitis: in melanin rich skin

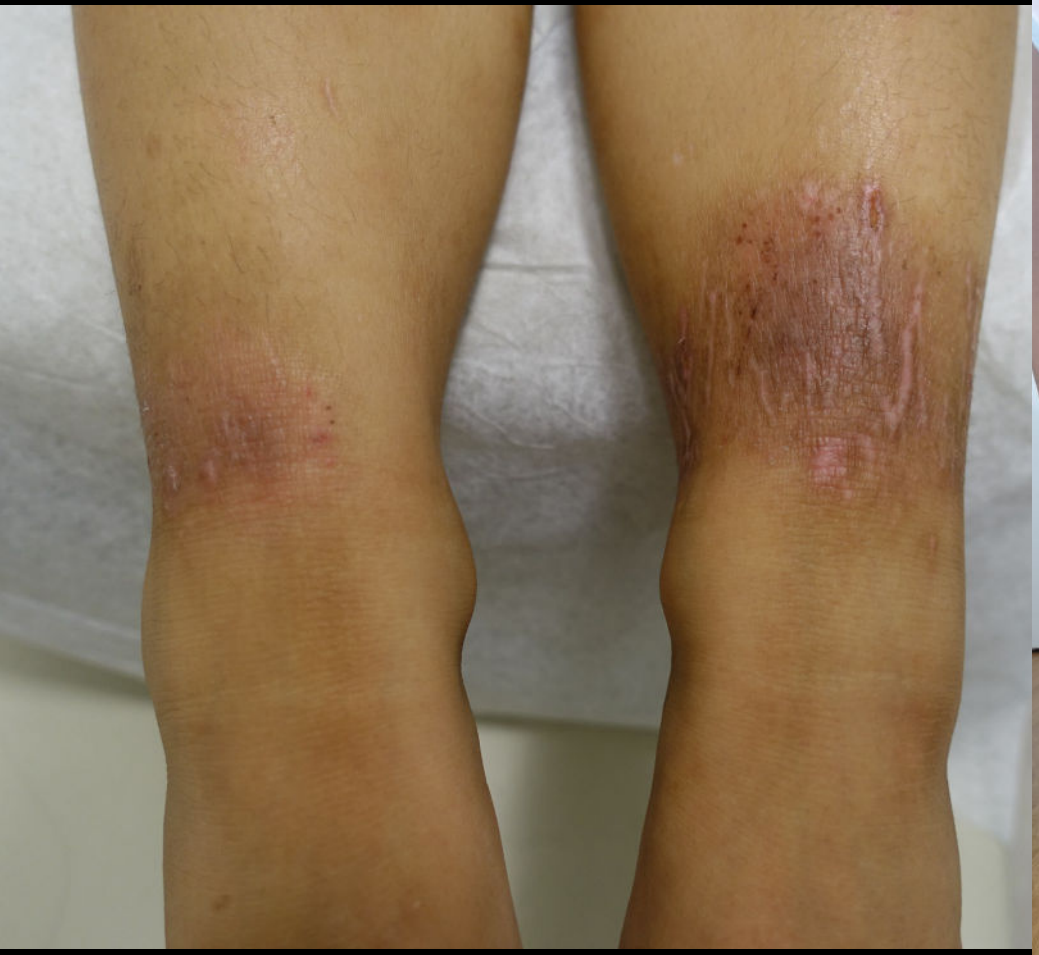


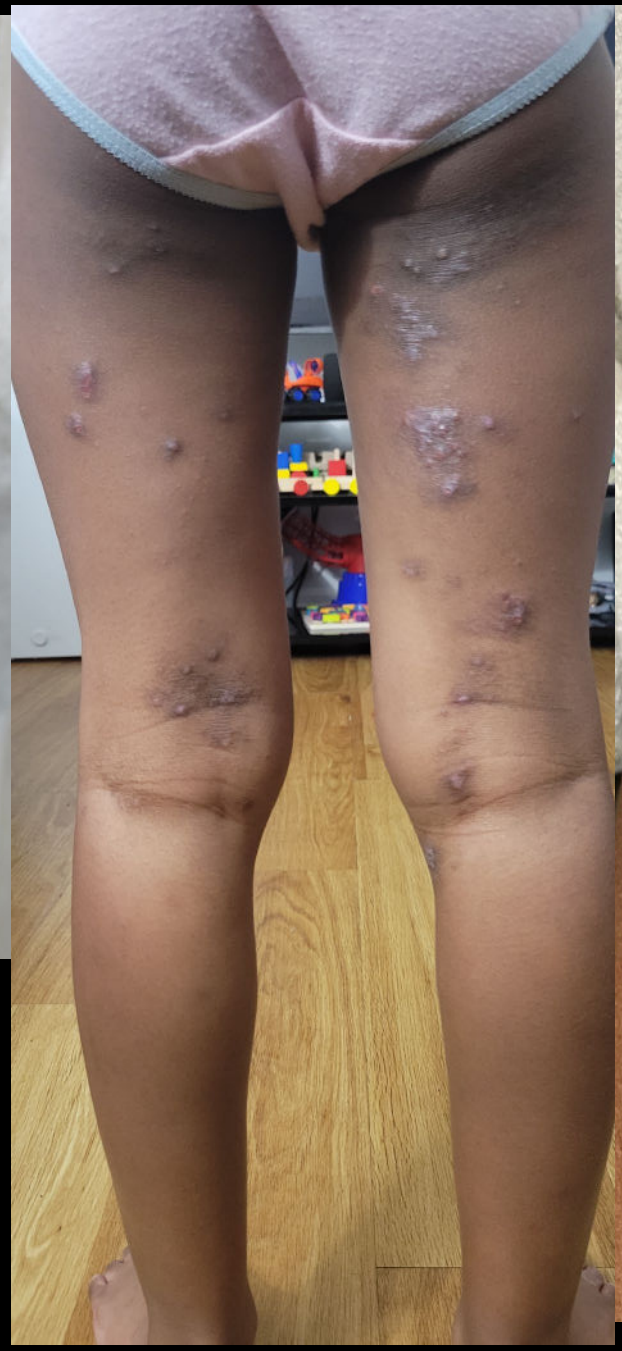
- Truncal distribution of lesions more common
- Perifollicular accentuation, xerosis, scaling, lichenification more prominent
- More likely to develop dyspigmentation: post-inflammatory hyper- or hypopigmentation
- Post-inflammatory hyperpigmentation associated with significantly lower QoL

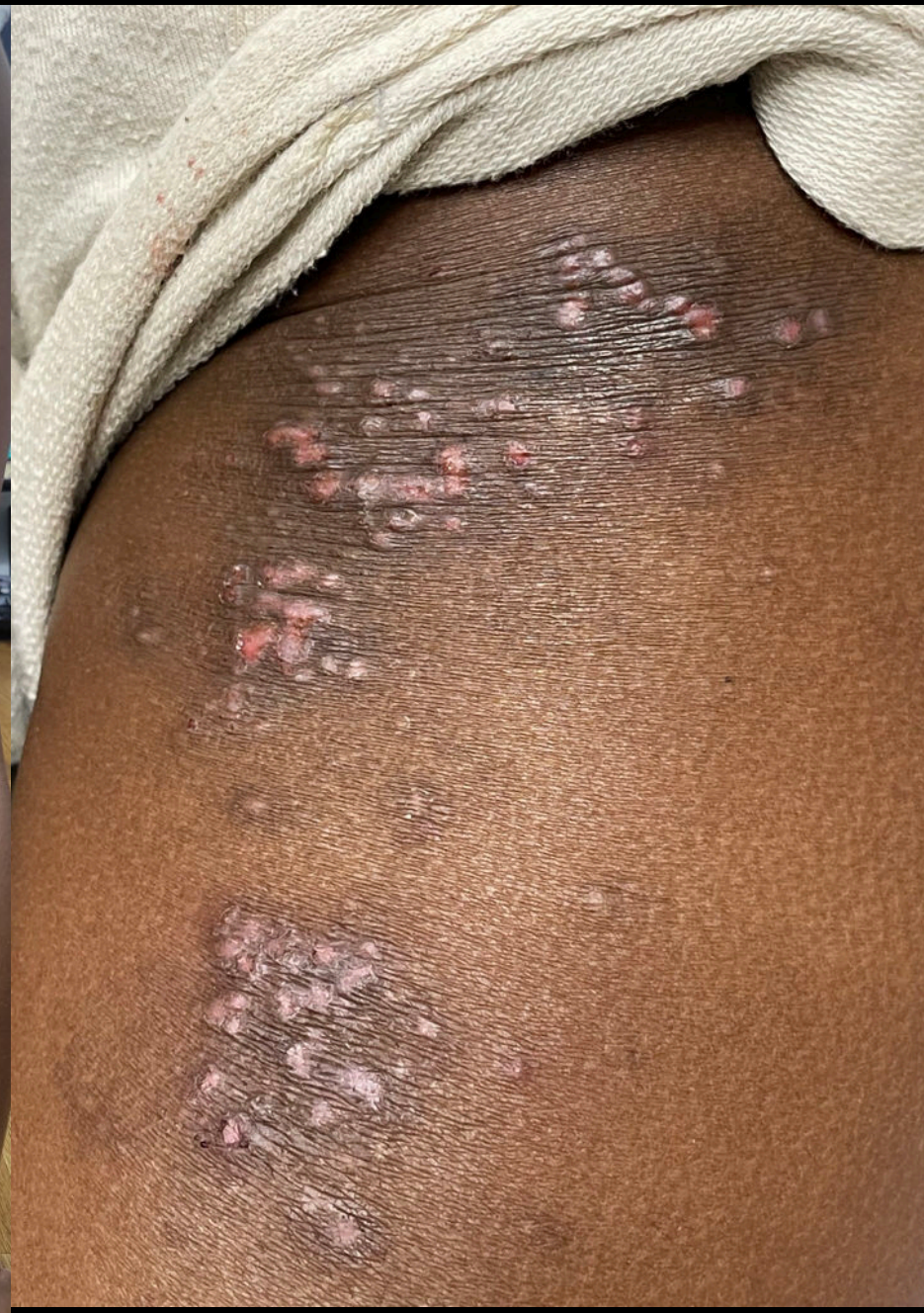
McKenzie S, et al *J Am Acad Dermatol* 2022
Silverberg JI,et al. *J Eur Acad Dermatology Venereol*. 2019;33(7):1341-1348





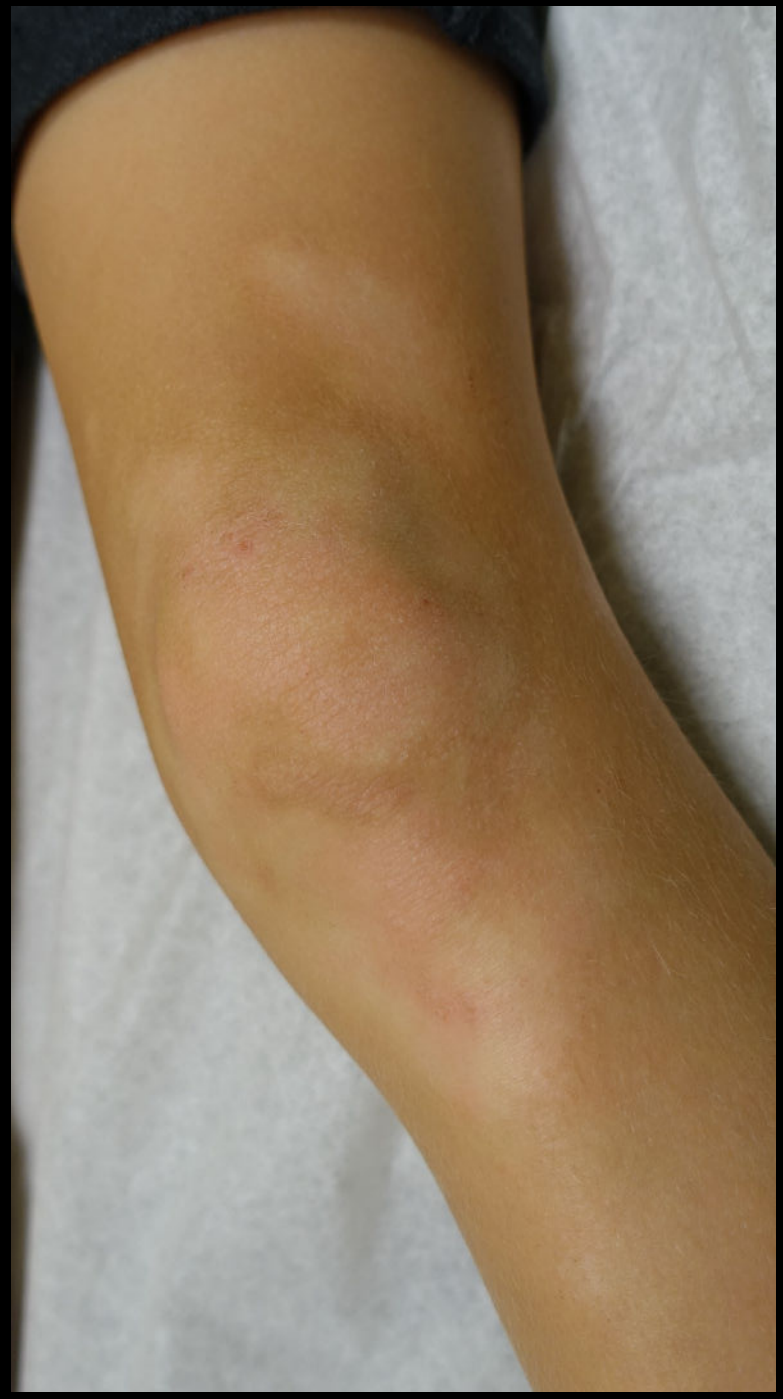






Post-inflammatory pigment alteration in atopic dermatitis

- Represents
  - Partial treatment
  - Chronic disease
- Requires
  - Aggressive treatment of underlying disorder – lower threshold for systemic
  - Active maintenance with non-TCS in between flares
- Set expectations – re-pigmentation is a slow process
- State specific treatment for the dyspigmentation

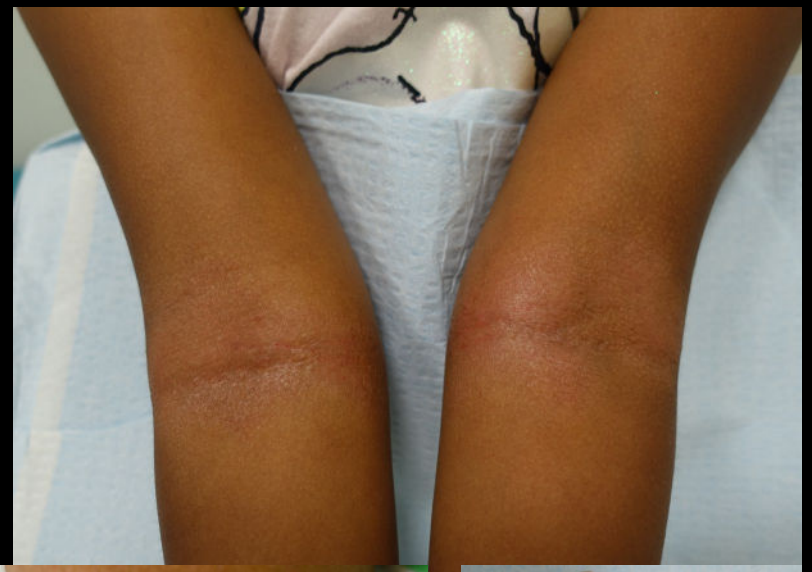


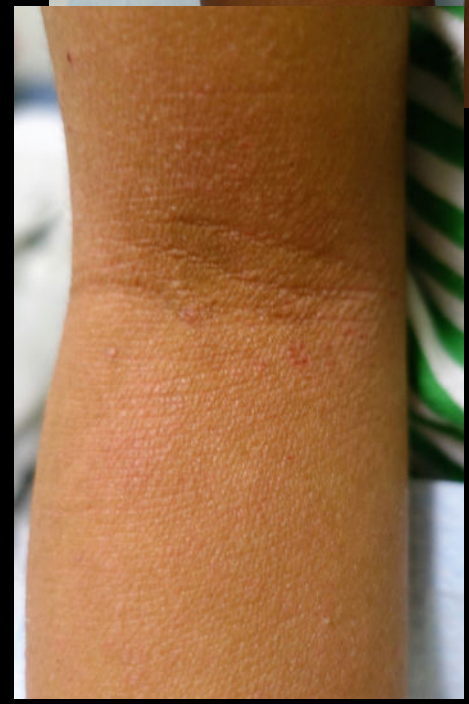
Atopic Dermatitis Management Tips in SOC

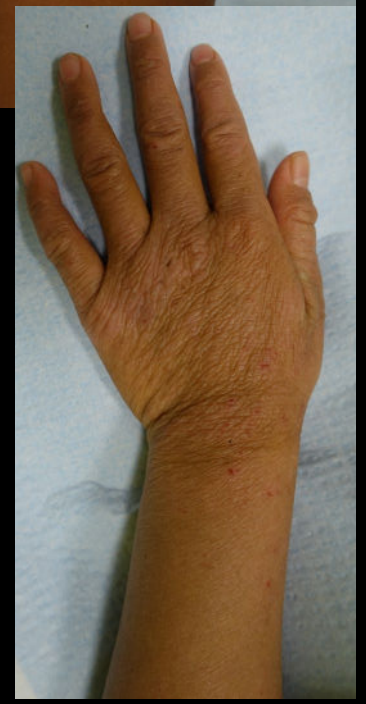
- Early diagnosis is essential

- Education
  - Early recognition of a flare – usually lacks erythema
  - Treatment until clear
  - Emollients

- Treatment:
  - Often require daily maintenance therapy
  - Start systemics earlier
  - Rarely use lightening agents

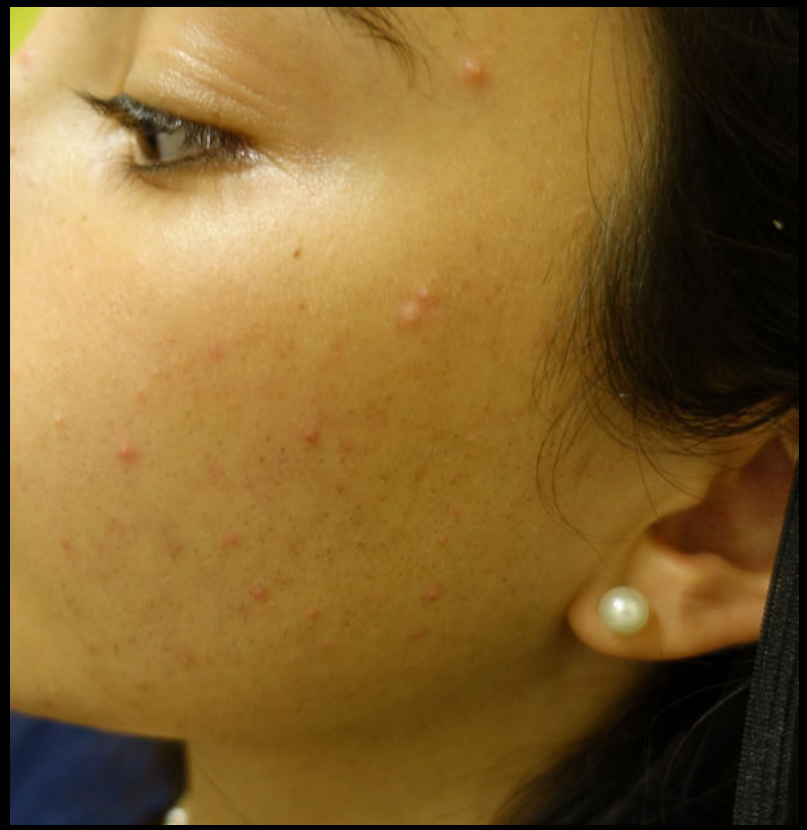






Acne induced macular hyperpigmentation

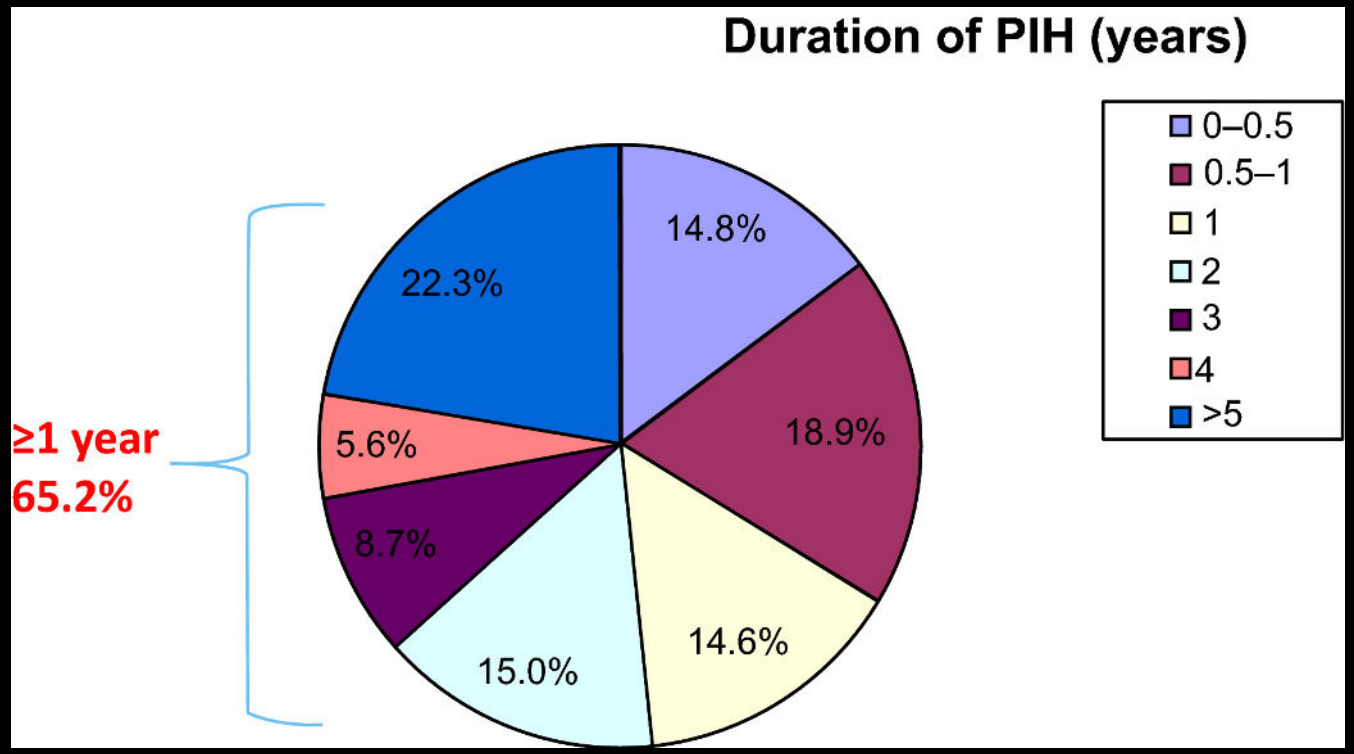
- Post-inflammatory is a misnomer = inflammation present throughout
- Hyperpigmentation accompanies all acne lesions in patients w skin phototype III or greater
- Present in all severities of acne



Taylor S, etal *J Am Acad Dermatol* 2023 Aug;89(2):316-323

Acne induced macular hyperpigmentation is long lasting and negatively impacts quality of life

- 324 acne subjects from seven countries
- 58.2% (188/324) had PIH
- 32.2% of subjects reported that PIH was more bothersome than acne
- Cross-sectional study 419 patients with disorders of hyperpigmentation and QOL
- Severe to very severe effect in 23.8% and mild to moderate effect in 57.1%
- Highest DLQI score for post-inflammatory hyperpigmentation (8.57) significantly greater than melasma (7.05)



Maymon MBC et al. J Am Acad Dermatol 2017
Abad-Casintahan F, et al Journal of Dermatology, Volume: 43(7): 826-828, 27 January 2016

Treatment of Acne induced macular hyperpigmentation (AMH)

- Acne +AMH = early and effective, proactive
  - Retinoid + BPO
    - +/- other topical agents: clascoterone, antibiotics (dapsone, clindamycin), etc.
    - +/- systemic agents: Antibiotics, spironolactone, isotretinoin

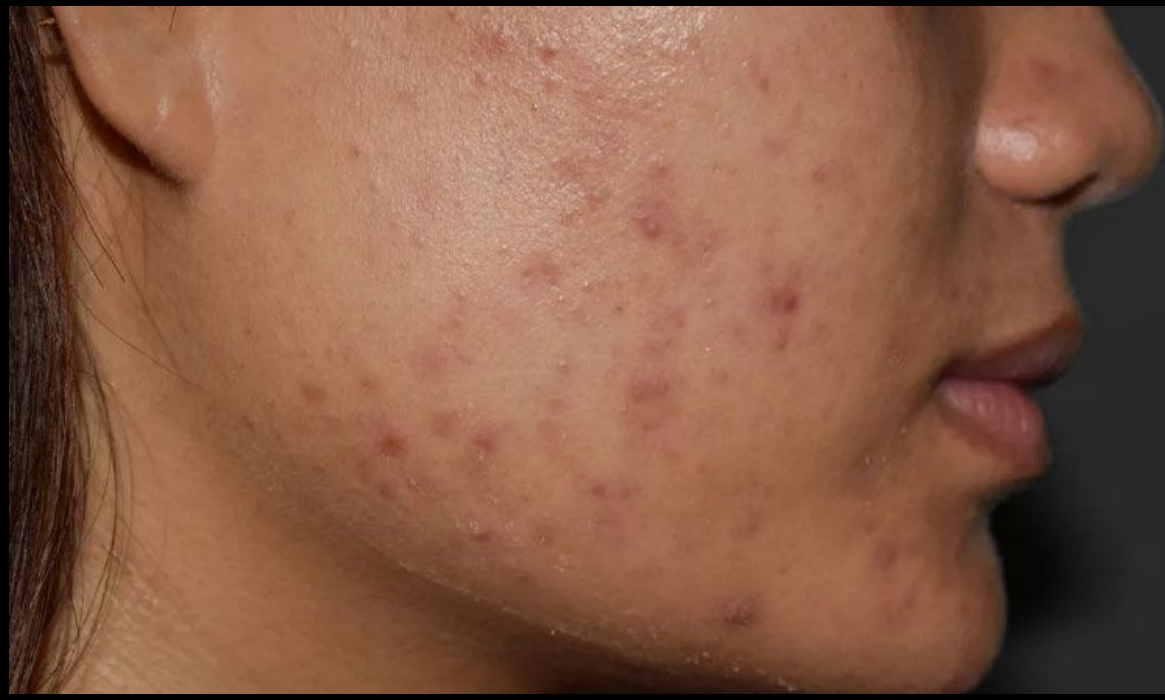
- Retinoids have lightening properties:

  1) Increase epidermal turnover

  2) Inhibit expression of tyrosinase/tyrosinase-related protein 1 (to interrupt melanin synthesis)

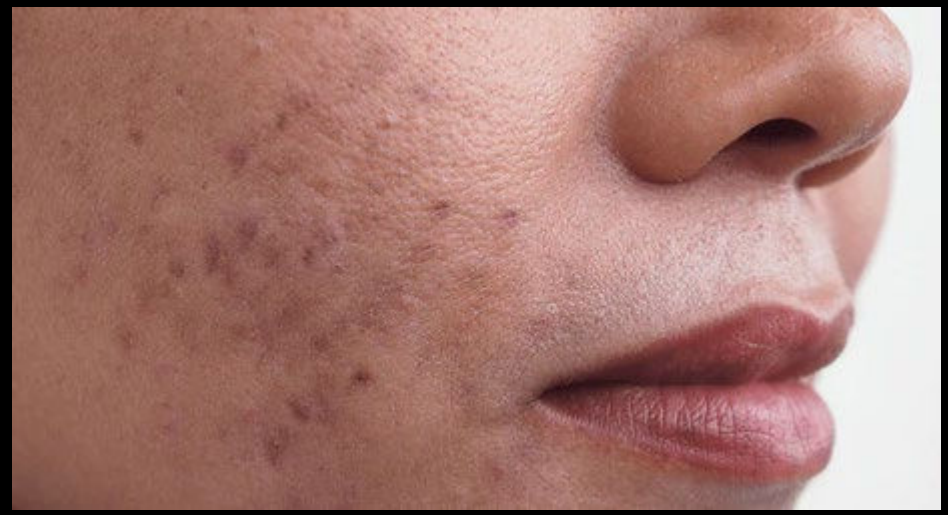
  3) Stimulate apoptosis may remove mature melanocytes from epidermis

- Sun protection daily



Ortonne JP. Retinoid therapy of pigmentary disorders. Dermatol Ther. 2006;19(5):280-288.
Taylor S, etal *J Am Acad Dermatol* 2023 Aug;89(2):316-323

Treatment of Acne induced macular hyperpigmentation (AMH)



- Minimal to absent acne + AMH
- Add depigmenting agents:
- Hydroquinone (HQ)
  - blocks the synthesis of melanin by inhibiting sulfhydryl groups and acting as a substrate for tyrosinase.
  - It also inhibits DNA and RNA synthesis in a reversible fashion and may inhibit the production of melanosomes.
  - weak tyrosinase inhibitor and melanocytotoxic.
- Potential side effects: (long-term use) ochronosis allergic reactions (esp. w sodium metabisulfite)
- Azaleic Acid
  - Inhibits tyrosinase and has anti-inflammatory, antimicrobial, and antikeratinizing effects that are beneficial

Ortonne JP. Retinoid therapy of pigmentary disorders. Dermatol Ther. 2006;19(5):280-288.
Taylor S, etal *J Am Acad Dermatol* 2023 Aug;89(2):316-323

Treatment of Acne induced macular hyperpigmentation (AMH)

- Minimal to absent acne + AMH →Other agents:
- Vitamin C

- Kojic acid
  - inhibits the production of free tyrosinase and has antioxidant activity
  - patients who do not respond to HQ benefit from the addition of kojic acid
- Arbutin
  - competitively inhibit tyrosinase activity and inhibit melanosome maturation

Available in various OTC and compounded preparations

Taylor S, et al *J Am Acad Dermatol* 2023 Aug;89(2):316-323

- Summary of clinical trials that have evaluated changes in pigmentation in AMH

Procedures (second line/adjunctive): Chemical peels; microneedling; IPL; Picosecond lasers; low-energy, nonablative, fractional, 1927-nm, 650- microsecond, 1064-nm nd:YAG

Table II. Clinical studies evaluating changes in pigmentation in acne-induced macular hyperpigmentation

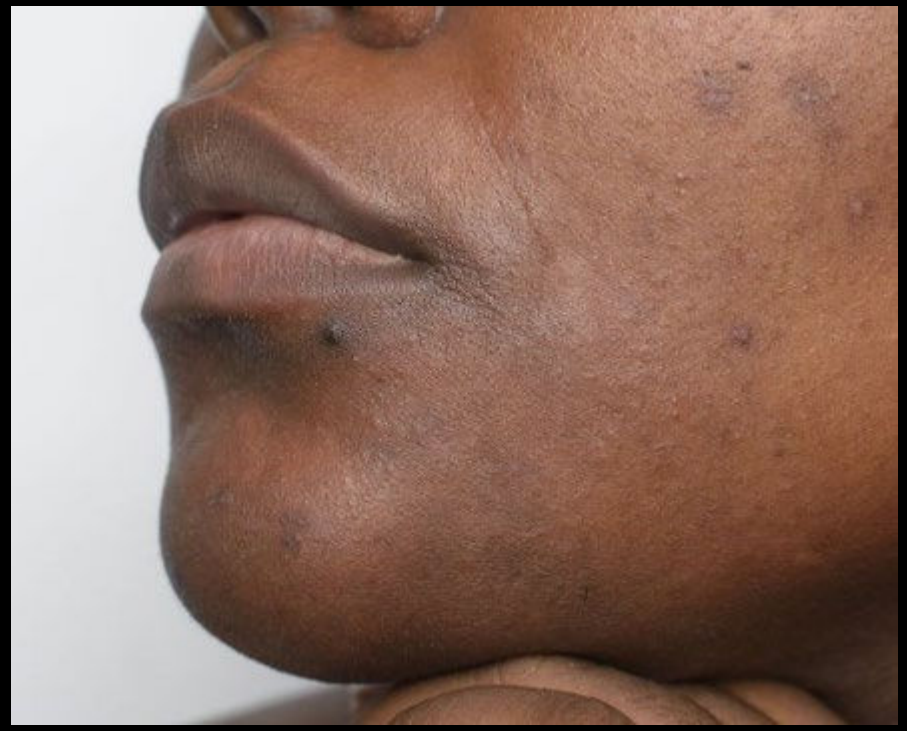
Study	Design	Treatment	Efficacy
Topical retinoids Jacyk et al[57]	Open-label, 12-wk study, n = 65 African patients	Adapalene gel 0.1%	66% of patients had decreased hyperpigmented macules and hyperpigmentation density
Bulengo et al[26]	Double-blind, vehicle-controlled 40-wk study, n = 54 Black patients	Tretinoin cream 0.1%	Lightening in 92% tretinoin-treated patients vs. 57% control, $P < .001$ Could not show a reduction in high tyrosinase activity with tretinoin; proposed that the action was primarily via melanogenesis inhibition and redistribution or dispersion of epidermal melanin
Grimes and Callender[27]	Double-blind, randomized, vehicle-controlled 18-week study, n = 74 darker-skinned patients	Tazarotene cream 0.1%	Significantly greater reduction in intensity and area of hyperpigmentation vs. vehicle (P = .01)
Bhatia et al[28]	Post hoc analysis pooled phase 3 data	Polymeric tazarotene lotion 0.045%	The incidence of hyperpigmentation decreased in Black patients treated with tazarotene
Azelaic acid Kircik[54]	Single-center, open-label, 16-wk study in patients with Fitzpatrick IV-VI and mild acne + moderate-to-severe PIH, n = 20	Azelaic acid gel 15%	At wk 16, 100% of patients had ≥2-grade improvement on 6-point PIH global assessment scores; at wk 16, 31% of patients had no PIH, 54% had slight PIH, 15% had mild PIH; and the distribution of PIH was reduced
Clindamycin/ BPO Amar and Kircik[29]	Open-label, 16-wk study in patients with Fitzpatrick V-VI and moderate facial acne, n = 20	1.2% clindamycin phosphate/BPO gel 3.75%	The severity and distribution of PIH significantly reduced at wk 16, 40% of patients had none/slight rating of PIH severity, 95% of patients had ≥1-grade improvement in PIH severity, and 75% had ≥1-grade improvement in PIH distribution
Chemical peels How et al[3]	Double-blind, randomized, split-face controlled trial, n = 36 subjects with Fitzpatrick IV-V	Jessner solution vs 30% salicylic acid	Significant reduction ($P < .001$) in postacne hyperpigmentation index, no significant differences in efficacy between treatment groups
Grimes[42]	Open-label pilot study, n = 25 subjects with Fitzpatrick V-VI	20% and 30% salicylic acid after 2 wk of pretreatment with HQ	Moderate-to-significant improvement in 88% of subjects; minimal-to-mild side effects in 16%

BPO, Benzoyl peroxide; *PIH*, postinflammatory hyperpigmentation.

Taylor S, et al *J Am Acad Dermatol* 2023 Aug;89(2):316-323

Treatment of AMH

- Treatment for AMH generally requires concurrent treatment of acne and often incorporates agents that have dual effects on acne and AMH
- Low strength topical retinoids (initially) to avoid iatrogenic PIH
- Early effective treatment emphasizing need for continued retinoid
- Targeted treatment
- Keep it simple especially for younger adolescents
- Sun protection daily: SPF > 30, daily, give specific recommendations



Ortonne JP. Retinoid therapy of pigmentary disorders. Dermatol Ther. 2006;19(5):280-288.
Taylor S, et al *J Am Acad Dermatol* 2023 Aug;89(2):316-323

Example handout

MINERAL BASED

TINTED SUNSCREENS

NON-COMODOGENIC & OIL FREE

PHYSICAL SUNSCREEN

EXTRA MOISTURIZING

WATER RESISTANT

Example handout

NON-COMODOGENIC

WATER RESIDENT

NON- TINTED SUNSCREENS

EXTRA MOISTURIZING

Explore cultural practices

- It’s a family affair!
- Fragrance and cologne use
- Antibiotic/steroid/antifungal compounds commonly used
- Corn starch & talcum powder
- Use of homeopathic remedies
- Concern for fungal infection and vitiligo etc.

CVS y mas baby aisle

Summary

- Dyspigmentation secondary to inflammatory skin disease is commonly the presenting complaint
- Recognize subtle clues for severe disease presentations, treat aggressively to prevent PIH
- Early recognition and treatment essential
- AMH often accompanies acne and needs treatment for both
- Explore cultural context