

# Pediatric Skin of Color Symposium Masters of Pediatric Dermatology 2021

## Keloids

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# Disclosures

Off-label: Some drugs discussed may be off-label for the pediatric population

Financial Disclosures relevant to this lecture: none

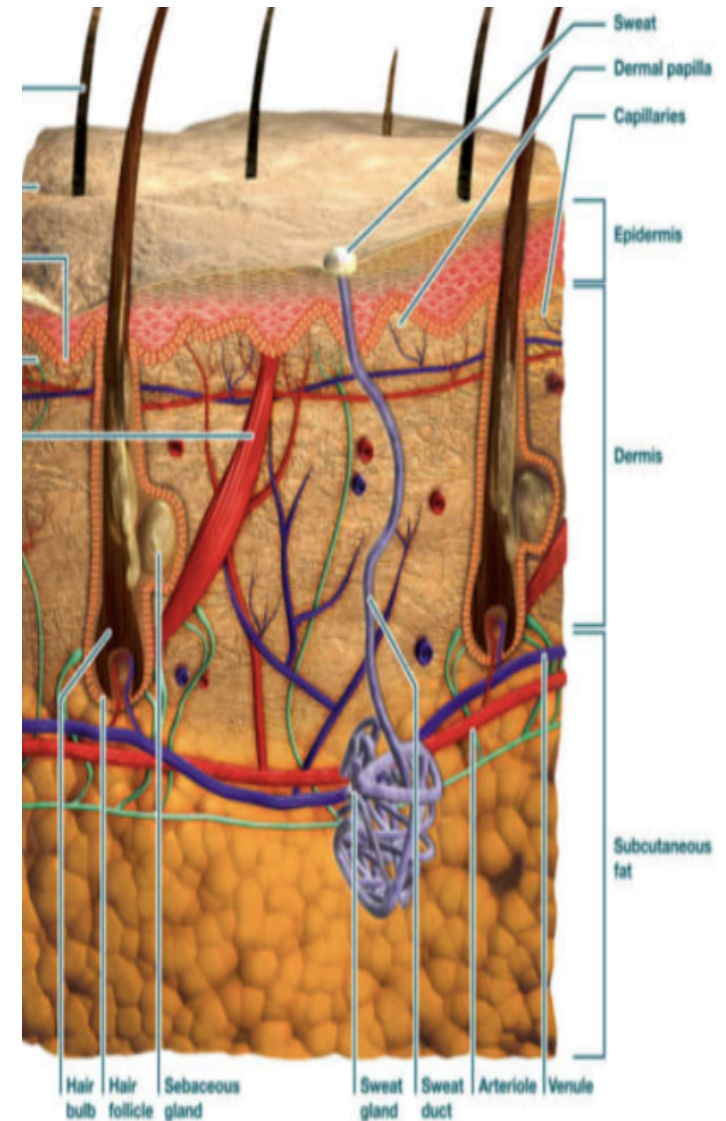
# Objectives

- Compare the prevalence of keloids in patients with skin of color to those without skin of color
- Identify some conventional treatment options

# Biology of Skin of Color

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

Fibroblasts interact with other cells and growth factors → keloid formation



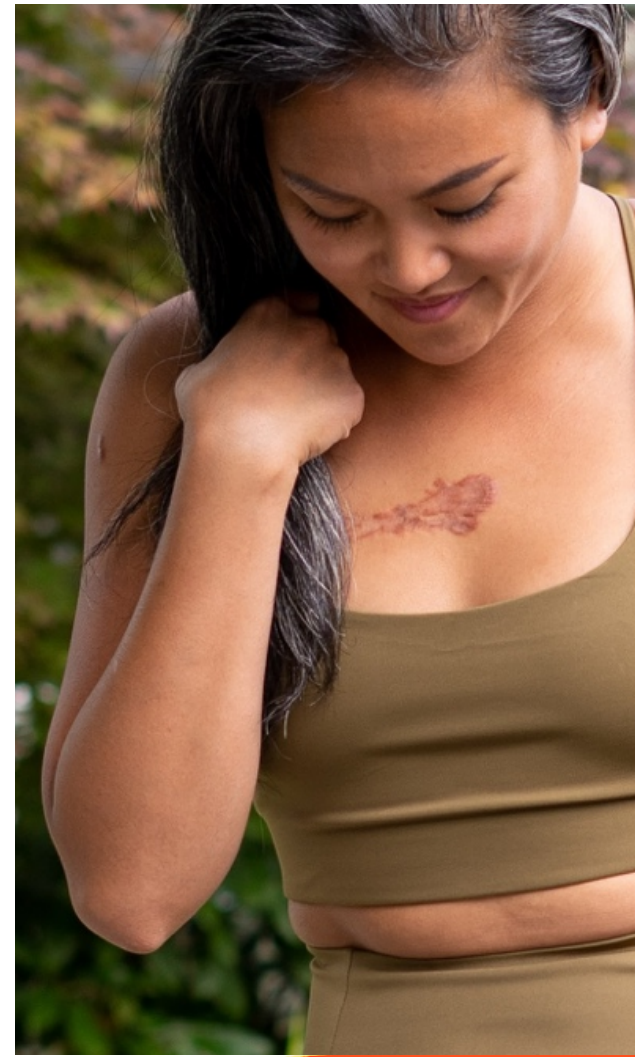


# Keloid Stats

- 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 22-23 years old

# Most Common Locations

- Earlobes
- Pre-sternal



# When to treat?

- Treat as soon as possible... BUT
  - Patient should be willing participant
  - Expectations should be set
    - More than one treatment
    - Discomfort

# Pediatric Patient Discomfort

- Topical Anesthetic
  - Ex. Prilocaine-lidocaine cream
- Distractors
  - Phone/Tablet

# Intralesional Steroids

- Set Expectations
  - Symptomatic relief
  - Flattening
  - The skin will not return to a normal appearance even if it is flatter
  - dyspigmentation

# Intralesional triamcinolone

- Concentration
  - Bottles: 10mg/mL and 40 mg/mL
    - For keloids, I usually use 20mg/mL or 40mg/mL



# Intralesional triamcinolone: Avoid Common Pitfalls

- If diluting the triamcinolone
  - Mix appropriately (precipitates) - roll
  - Don't over dilute
  - saline vs. lidocaine
- Equipment
  - Luer-lock syringes to avoid the needle flying off the syringe and creating a splash/spray

Luer Lock



Luer Slip



# Intralesional triamcinolone technique

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



# Corticosteroids (topical/intralesional)

- Decreases collagen synthesis
  - by inhibiting fibroblast proliferation
- Decrease Pro-inflammatory mediators
- Collagenase degrades collagen
  - Steroids inhibit collagenase inhibitors

# Topical corticosteroids

- Topical steroids from the highest potency class
- Steroid imbedded tape
  - Flurandrenolide tape



# Laser

- SOC: higher risk of pigmentary alterations
  - Fractional nonablative lasers- better option for scars in skin types IV to IV
- Ablative lasers
  - Carbon dioxide alone: recurrence 39-92%
    - With ILK: recurrence 25-74%

# Excision

- Monotherapy excisions have a very high risk of recurrence
  - Some say 80-100% and others 50-100%
  - Less for earlobe keloids

# Surgical considerations

- Smallest possible excision to remove all of the keloidal tissue
- Limit wound tension
- If sutures are necessary, select type that will cause the least amount of inflammation and lowest risk of infection
  - monofilament

# Post-Excision

- Intralesional triamcinolone helps to delay recurrence post-op
  - immediately on the day of the surgery
  - Repeat post-op intralesional triamcinolone every 2 weeks for 6 weeks post op, then monthly, then every 2 months

# Earlobe Keloid Post Excision

- Pressure earrings
  - More stylish than the used to be
  - Ex. Etsy

# Setting Expectations

- Avoid tattoos, piercings, elective surgery
- If surgery is mandatory:
  - Silicone gel products
    - Worn 24 h/d for up to 12 months, 34% showed excellent improvement, 37.5% showed moderate improvement, and 28% demonstrated no or slight improvement.
  - Intralesional triamcinolone



# CASE

Mother of a Black infant calls to ask if it is ok to pierce her baby's ears

What things do you consider?



# Keloids

- Family history?
  - Based on a survey study, piercing before age 11 y/o reduces chance of earlobe keloids

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