

# Hair Care Considerations in Black Women

Crystal Aguh MD

Associate Professor of Dermatology

Director, Ethnic Skin Program

Johns Hopkins School Medicine

# Hair Basics

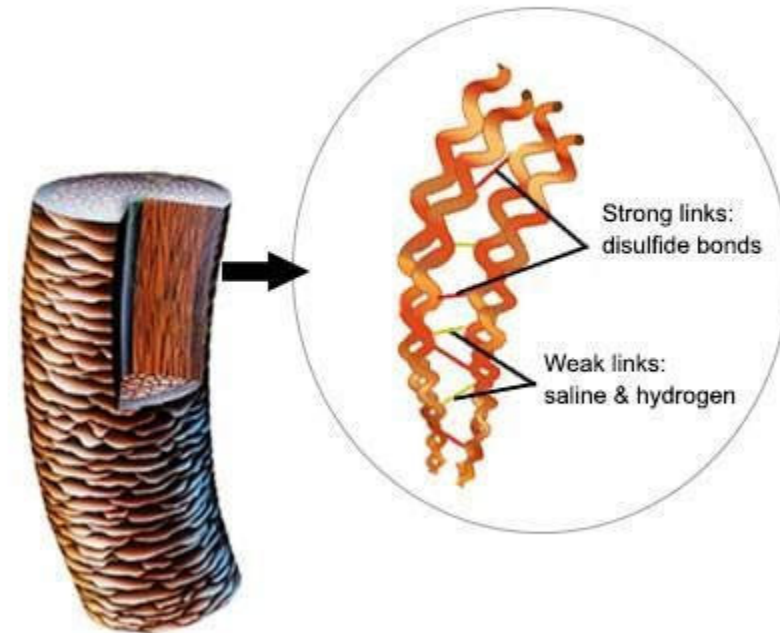
- ▶ Similar chemical structure amongst all major racial groups
- ▶ Different physical properties

PARAMETER	ASIAN	CAUCASIAN	AFRICAN
Growth rate (um/day)	411	367	280
Hair Density (hairs/cms2)	175	226	161
Ellipticity	90% (circular)	75% (less circular)	60% (oval)

# Hair Basics

- ▶ Permanent treatments work by affecting the cortex
- ▶ To permanently change the shape of the hair, disulfide bonds must be altered
- ▶ Sebum, a product of the scalp sebaceous glands, is a natural moisturizer that protects the scalp from normal weathering
- ▶ Sebum has a more difficult time traveling down the shaft of curly hair making it more susceptible to breakage

Hair structure, strong links and weak links



# Hair Fragility

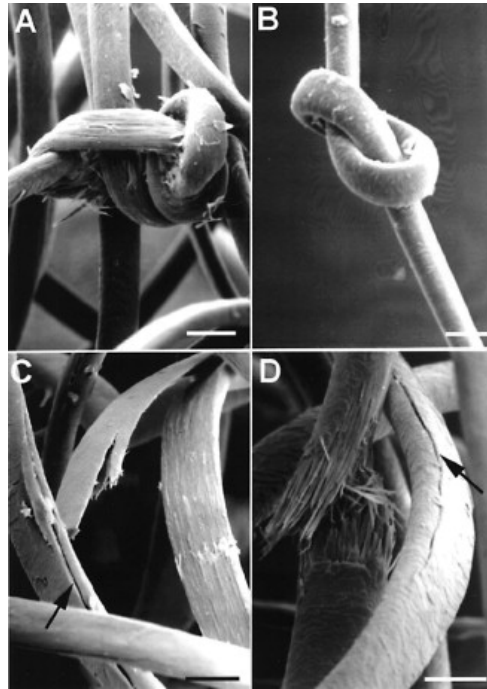
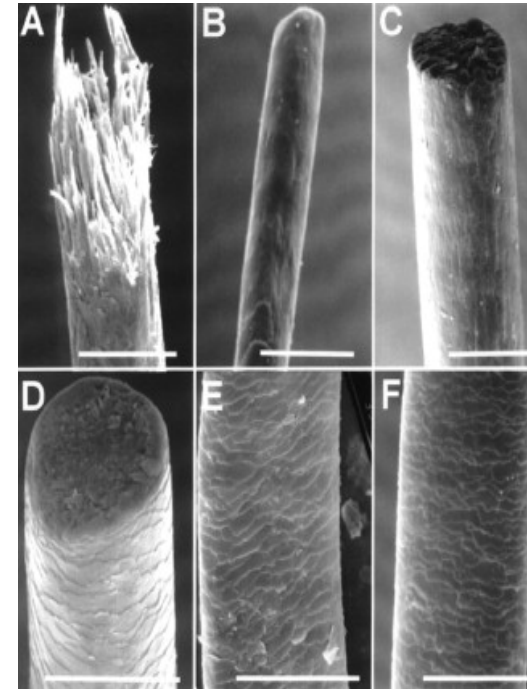


Fig. 1. **A**, Detail of knot in the African hair. Note complex nature of the knot with damage to the cuticle exposing the cortical fibers. **B**, Detail of the only knot observed in the Caucasian hair, which appears to be looser with no damage to the cuticular layer. **C** and **D**, Details from African hair mat shows the longitudinal fissures of the shafts (*arrows*) plus examples of splitting (**C**) and breaking (**D**) of the hair shaft. (**A-D**, Scale bar = 0.1 mm.)

Khumalo, N. P., et al. "What is normal black African hair? A light and scanning electron-microscopic study." *Journal of the American Academy of Dermatology* 43.5 (2000): 814-820.



**A**, SEM of an African hair shows serrated appearance of a fractured tip with exposure of the cortical fibers. **B**, SEM of Caucasian hair shows original tip with loss of cuticular pattern resulting from weathering. **C**, Tip of Caucasian hair with flattened end, probably as a result of cutting. Note extensive wearing of the hair shaft with loss of the cuticular pattern. **D**, Tip of Asian hair exhibits a cut end and relatively little weathering of the hair shaft. **E**, Part of mid-portion of an African hair shaft shows the well-preserved cuticular pattern with no evidence of weathering. **F**, Mid-portion of Caucasian hair shaft shows the well-preserved cuticular pattern. (**A-F**, Scale bar = 0.1 mm.).

# Chemical Relaxers



- ▶ Use of highly alkaline chemical (sodium hydroxide) to break disulfide bonds and straighten hair
- ▶ Enhance styling ease by minimizing tangles thus requiring less upkeep
- ▶ Greater sebum coating on hair strands + easier to moisturize
- ▶ Cons: broken disulfide bonds weaken the hair strands making it more prone to breakage with similar applied force or damage (i.e. braiding, heat)

# Wigs

- ▶ Popular styling choice among young women
- ▶ Can be attached in place for several weeks or removed nightly
- ▶ Minimal tension on the hair if removed nightly
- ▶ Downside, given enhanced ease of use and at home application, over-reliance can lead to less hair care and more breakage over time



January 31,  
2024





# Lace Front Wig Installation



## Sisterlocks/Dreadlocks Ideal Vs Reality



# Traction Alopecia

- ▶ Occurs along the crown of the scalp as a result of tight hair styles. Commonly coexists with CCCA and can be more difficult to treat
- ▶ One study estimated a prevalence of 32% among black women. Women with relaxed hair were more than 3.5 times more likely to develop traction alopecia compared to those with natural hair
- ▶ In my personal experience, approximately 2/3 of women with CCCA will present with traction alopecia

# Dr. Aguh's Three Stages of Traction Alopecia



Stage 1- regrow with minimal intervention



Stage 2- regrow with medical intervention only



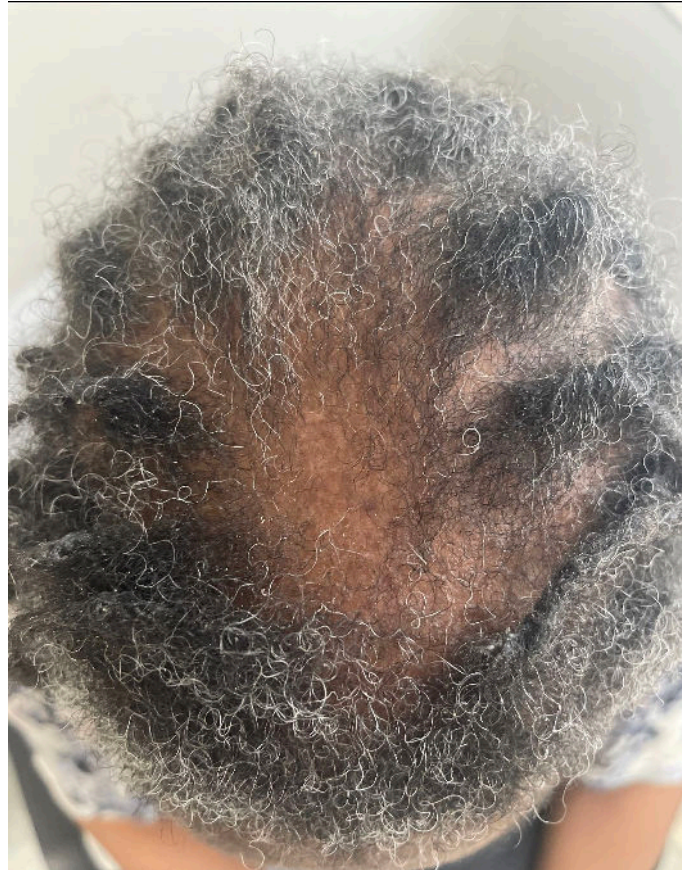
Stage 3- requires procedural intervention

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# Rule out CCCA



January 2023



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# Traction Alopecia-Special Considerations- Locs

- ▶ Locs are a popular hairstyle among men and women of the African diaspora for a few reasons
  - ▶ Decrease need for routine maintenance
  - ▶ Allow wearer to achieve long lengths not attainable without locs
  - ▶ People feel reassured about being “natural”
- ▶ Common cause of traction alopecia both in the frontal hairline AND central scalp due to constant retwisting (this practice is unique to this hairstyle)
- ▶ For many users, decreasing retwisting frequency to q8weeks or longer + potent minoxidil is enough
- ▶ For end stage traction or near end stage disease, urge removing locs completely as hair transplant is difficult often due to size of involved area



# All Hairstyles Are Not Created Equally

## Extensions to Avoid

- ▶ Microlinks
- ▶ Wigs glued to scalp/wig cap
- ▶ Tight locks (dreadlocks, sisterlocks)
- ▶ Braids
- ▶ Clip-Ins
- ▶ Any style that stays in place for >4 weeks, ESPECIALLY if you have scarring hair loss

## Extensions okay in moderation

- ▶ Removable wigs with satin or velcro caps
- ▶ Crochet braids (IF dry hair is not an issue)
- ▶ Large cornrows removed at least weekly
- ▶ Removable ponytail or bun extensions
- ▶ Large box braids (IF traction alopecia is not an issue)

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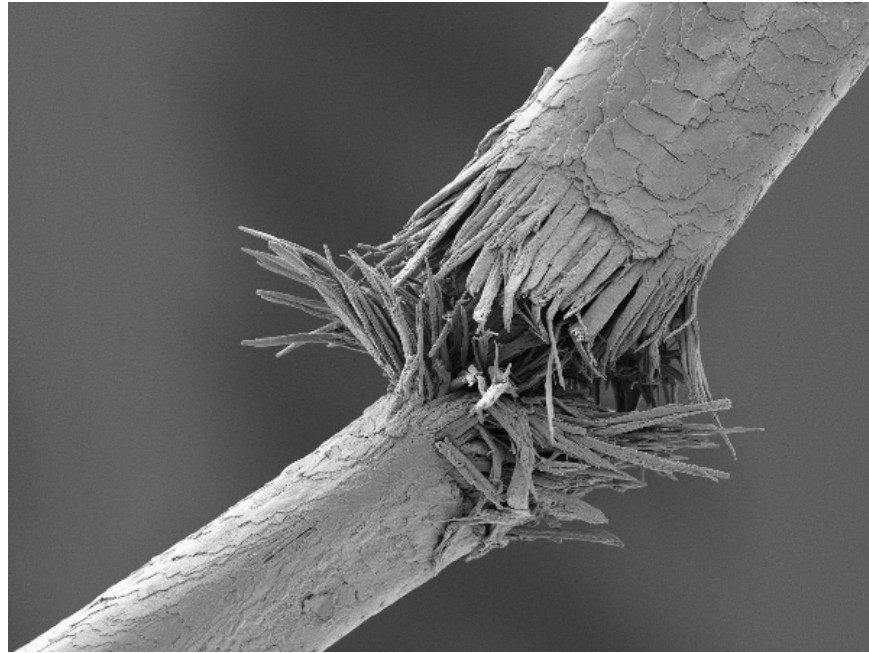
# Consult for CCCA



ILK + Doxy for 3 years with no improvement



No prescriptions, no ILK, 5 months of healthy hair routine



## Acquired Trichorrhexis Nodosa



# Acquired Trichorrhhexis Nodosa

- ▶ ATN is recurrent hair breakage that occurs as a result of damaging hair practices
- ▶ Common culprits include chemical relaxers, thermal styling and hair coloring
- ▶ Patients will often complain of lack of hair growth
- ▶ Can involve all parts of the scalp but nape of the neck is often affected

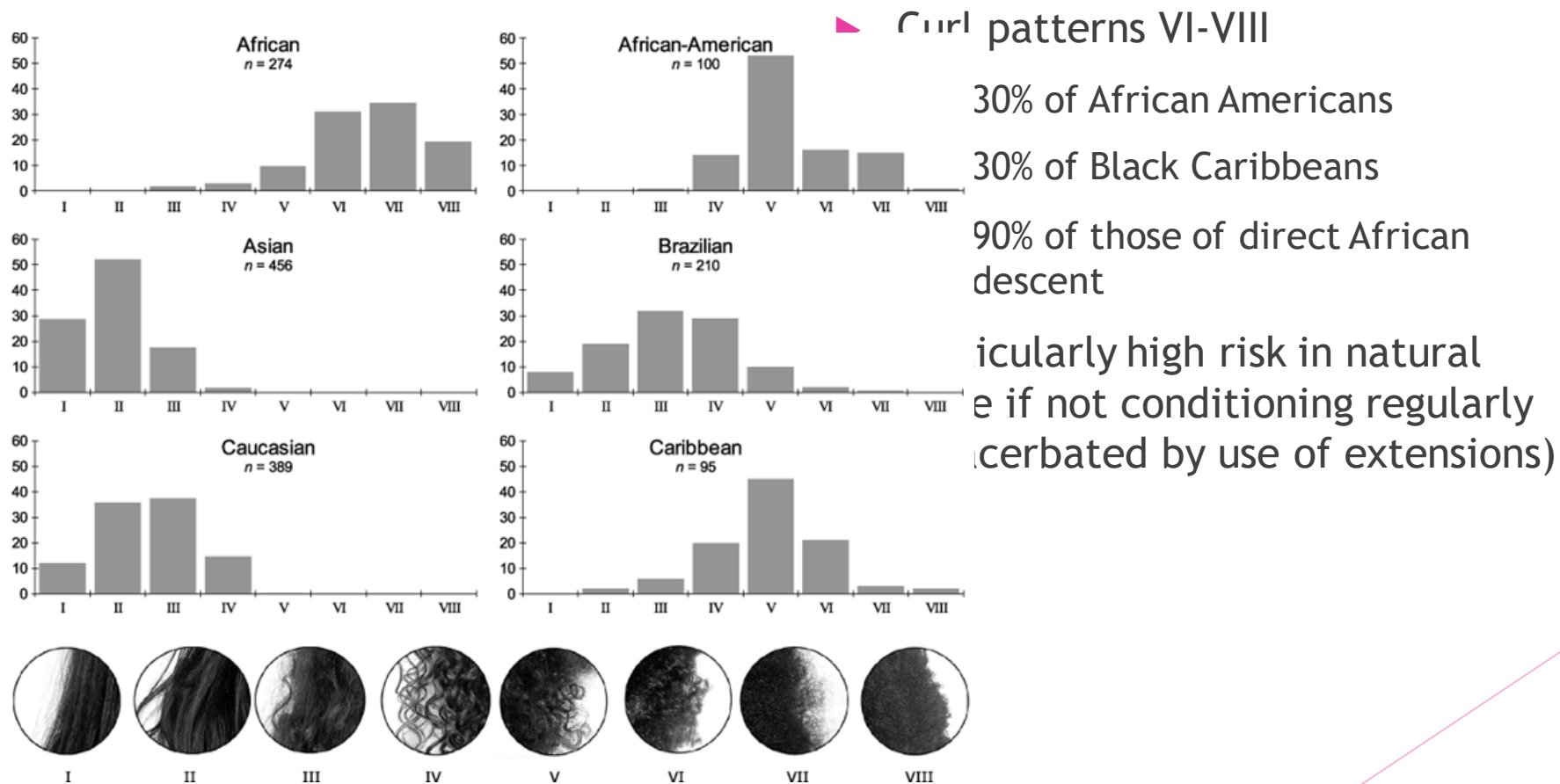


# Rule out CCCA



Patient presenting with inflammation, patches of smooth hair loss on the scalp. Significant regrowth noted after 4.5 months of healthy hair routine (+single ILK session). Hair care matters!

# Curl Patterns at risk for ATN



# Sample Hair Care Regimen for Damaged Curly Hair

- ▶ Apply protein treatment to dry or damp hair. Cover with shower cap or heating source for 30 minutes.
- ▶ Wash hair once weekly with sulfate free shampoo.
- ▶ Deep condition with every shampoo. Follow deep conditioning with moisturizing rinse-out conditioner.
- ▶ Add leave in conditioner after washing, at least 3x/week.
- ▶ End washing session with light oil (argan, grapeseed, olive, etc).
- ▶ Remind you of anything?
  - ▶ Soak and Smear

# Special Considerations for Treatment of Common Hair Disorders in Black Patients

Consider the qualities of black hair when prescribing medications. For instance, when treating seborrheic dermatitis or psoriasis

BAD: Ketoconazole shampoo, coal tar shampoo, salicylic acid shampoo

GOOD: Zinc Pyrithione, Ciclopirox, Fluocinolone oil

Consider normal hair care practices when discussing treatment options

BAD: Asking patients to wash their hair daily

GOOD: prescribing scalp oils or asking them to increase frequency to weekly

Consider hair care practices when recommending minoxidil

Solution: Better suited for curly hair due to lack of buildup that would normally occur with infrequent washing. Recommend regular moisturizer to scalp

Foams-better for patients who will wash their hair often (at least 2-3 times per week)



Questions? Email [cagi1@jhmi.edu](mailto:cagi1@jhmi.edu)