

Hair Care Considerations in Black Women

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Hair Basics

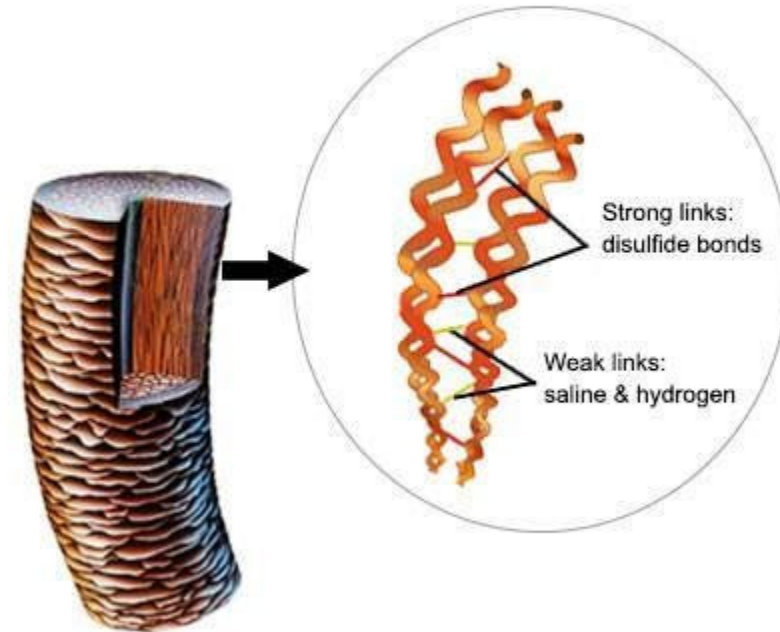
- ▶ Similar chemical structure amongst all major racial groups
- ▶ Different physical properties

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

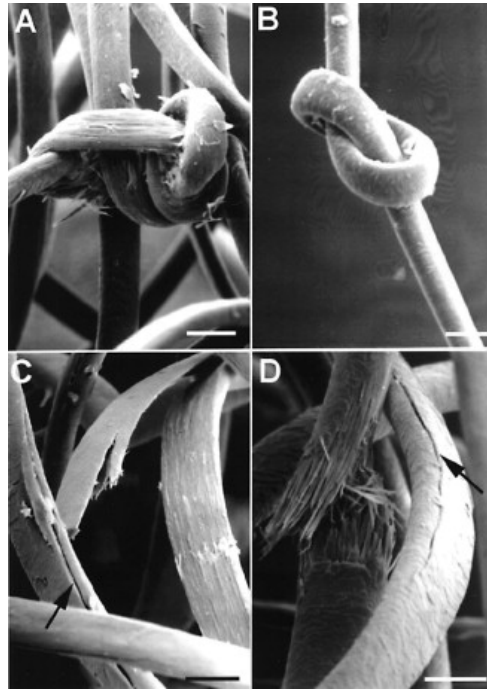
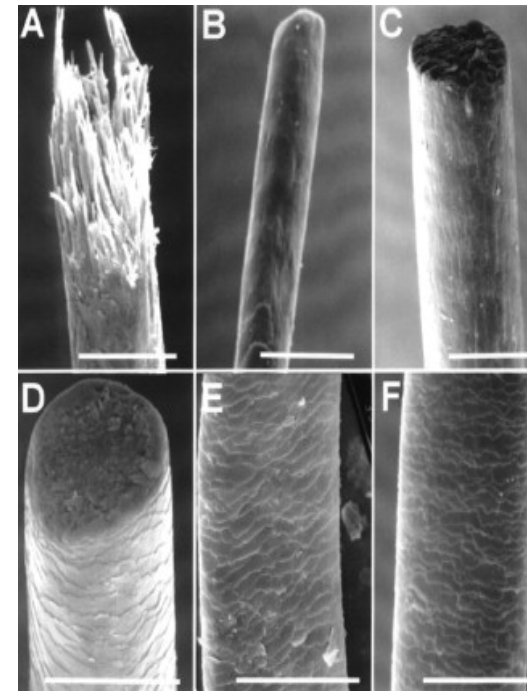


Fig. 1. **A**, Detail of knot in the African hair. Note complex nature of the knot with damage to the cuticle exposing the cortical fibers. **B**, Detail of the only knot observed in the Caucasian hair, which appears to be looser with no damage to the cuticular layer. **C** and **D**, Details from African 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





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

January 31,
2024

Rule out CCCA



January 2023



May 2023
January 31,
2024

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)

January 31,
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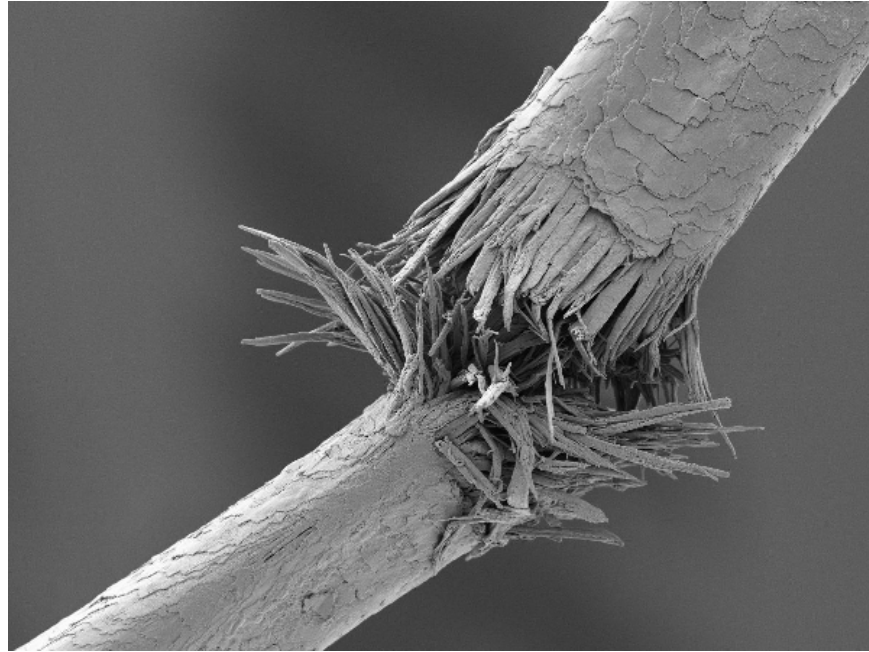
Consult for CCCA



ILK + Doxy for 3 years with no improvement



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



Acquired Trichorrhexis Nodosa

Acquired Trichorrhhexis Nodosa

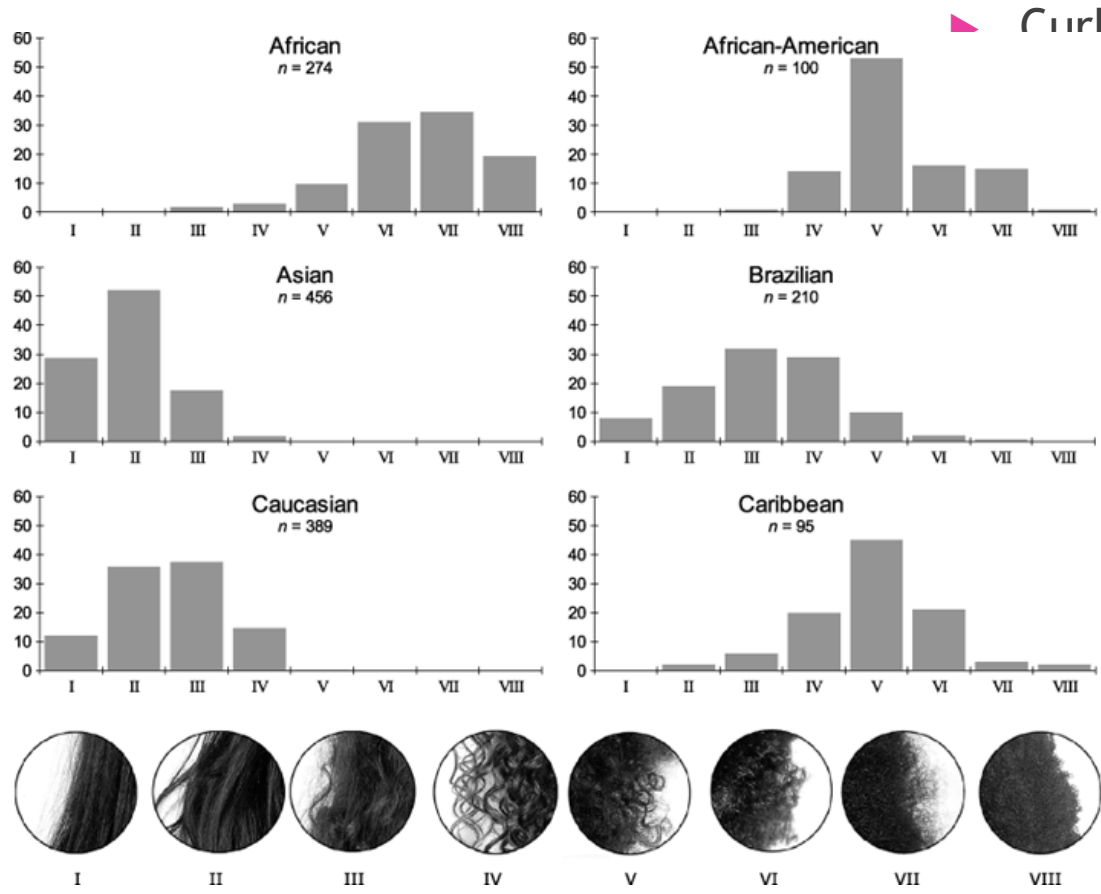
- ▶ ATN is recurrent hair breakage that occurs as a result of damaging hair practices
- ▶ Common culprits include chemical relaxers, thermal styling and hair coloring
- ▶ Patients will often complain of lack of hair growth
- ▶ Can involve all parts of the scalp but nape of the neck is often affected

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



▶ Curl patterns VI-VIII

30% of African Americans
 30% of Black Caribbeanans
 90% of those of direct African descent
 icularly high risk in natural
 e if not conditioning regularly
 (erminated by use of extensions)

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