HAIR CARE PRACTICES & SEBORRHEIC DERMATITIS IN SKIN OF COLOR

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NO DISCLOSURES OR FINANCIAL RELATIONSHIPS
OBJECTIVE

• Review common terminology
• Describe different hair styles commonly seen in communities of color
• To help dermatologists become more comfortable when discussing hair styles with patients of color
• To discuss risk factors and management of seborrheic dermatitis
HAIR-CARE

• Hair appearance and style play an important role
• Styling practices are determined by individual hair characteristics and preferences
  • Current and historic trends
  • Ease and convenience of styling
  • Climate/season, occupation or activities
  • Health and maintenance of hair
TECHNIQUES FOR HAIR STRAIGHTENING

- Straightening consists of temporary or permanent breaks in chemical bonds that maintain structure of keratin proteins.
- Keratin fibers have three types of inter-chain interactions:
  - Disulphide bonds
  - Hydrogen bonds
  - Electrostatic interactions

THERMAL HAIR STRAIGHTENING

• “Pressing”, “Press” or “Hot combing”
• Thermal manipulation of the hair unit temporarily disrupts the hydrogen bonds of keratin (keratin hydrolysis)
• Heating devices: hot comb, hot iron, flat iron, curling iron
• Heating element: stainless steel, ceramic, titanium
• Reaches temperatures of 150 – 500°C
THERMAL HAIR STRAIGHTENING

- Hair is washed and dried (air or blow dry)
- Pomade, oil or cream-based lubricant, or products containing silicones (dimethicone and cyclomethicone) is applied to hair
- Hair is partitioned and heating element is passed through the section of hair from hair root to end
- Pressing method depends on hair texture
- Temporary and reverts back to native state with water or humidity

CHEMICAL RELAXING

• Chemical straightening of the hair unit permanently alters the disulphide bonds of keratin

• Achieved through alkaline based products:
  • Lye-based straighteners:
    • Sodium hydroxide
  • Non-lye straighteners:
    • Guanidine hydroxide, Potassium hydroxide, Lithium hydroxide

• Alkaline pH allows penetration of chemical straightener through the hair cuticle into cortex

CHEMICAL RELAXING

- Disulphide bonds undergo rearrangement
  - ~35% cystine is converted to lanthionine (lanthionization)
    - Difference between a cystine and a lanthionine is the loss of one sulphur atom
CHEMICAL RELAXING

- The hair is divided into sections
- Relaxer is applied to hair
- Vaseline used to protect the scalp
- Relaxer is left in place for varied duration of time
- Hair is washed with an acidic ‘neutralizing’ shampoo
- Hair is then conditioned, dried and ready for styling
FORMALDEHYDE-BASED STRAIGHTENING

- “Brazilian Keratin Treatments”, “Keratin smoothing” or “Keratin straightening”
- Marketed to straighten, smooth, reduce frizz and enhance shine
- Hydrolyzed keratin amino acids are cross-linked to the hair keratin by formaldehyde or its derivatives Lasts 6 weeks to 5 months
- Concern for adverse effects of exposure to formaldehyde

TEXTURIZING

- Marketed to loosen the natural curl pattern of the hair
- Texturizers
  - Sodium/guanidine/lithium hydroxide
    - Similar mechanism to chemical relaxers however are left on the hair for shorter periods of time (5-10 minutes)
  - Ammonium thioglycolate
    - Less alkaline chemical straightener that selectively weakens the hair’s disulfide bonds instead of breaking them

C. Aguh & G. Okoye. Fundamentals of Ethnic Hair
BRAIDING & TWISTS

• **Braids**
  - Braids are composed of three or more interlacing pieces of hair
  - Different types of braids: Plaits, single box braids and microbraids

• **Cornrows**
  - Stationary braid that lays flat on the scalp
  - The hair is parted and sectioned. Designs can be varied and intricate.
  - Can be done with natural/relaxed hair or extensions can be added

• **Two-strand twists**
  - Hair is sectioned into two strands and each individual strand is progressively twisted and wrapped over the other

HAIR EXTENSIONS

• Hair extensions
  • Human hair
  • Synthetic hair
• Extensions can be clipped, pinned, crocheted, cornrowed or braided into hair for added length/body
HAIR WEAVES

- Human or synthetically manufactured hair
- Weave hair section (weave tract) is either sewn or glued in place
- Application of a weave can cost anywhere from the low hundreds dollars to $2,000+
- It can take anywhere from 2-8 hours to complete sewn-in hair weaves
SEWN-IN AND GLUED HAIR WEAVES

- Hair is cornrowed into horizontal or vertical patterns
- C-shaped weave needle and nylon thread
- Weave cap/net may be used
- Application
  - Sewn in by securing the weft to the cornrowed hair
  - Hair bonding and fusion with adhesives
LOCKS

• Dreadlocks and Sisterlocks
• Hair style worn by women, men and children
• Locks form when hair tangles and mats into clusters
• Once the style matures it is irreversible
• Avoid the term ‘dreadlocks’

LOCKS

- Loc styles are based on either a brick-look or diamond pattern
- Several beginning/starter style options include:
  - Free-form
  - Guided
    - Palm rolls, comb coils, 2-strand twists, braids
- Stages of locking
- Requires regular grooming and twisting of new hair growth

NATURAL HAIR

- Refers to hair that has not been chemically treated
- Increasing in popularity over the last decade
- Transitioning from chemically treated to natural hair:
  - “Big chop” refers to cutting off all chemically treated hair
  - Simply growing out chemically treated hair
  - “Protective styling” (e.g. braids, weaves, extensions)
PRESERVING HAIR STYLES

• Hair wrapping
• Pin curling
• Pineapple
SEBORRHEIC DERMATITIS

• Chronic inflammatory condition
  • Occurs on the scalp, face, & chest
  • Can affect infants, children and adults
  • Itchy, dry, flaky
  • Hypopigmented, hyperpigmented or erythematous plaques
  • Can result in alopecia due to underlying inflammation and scratching/rubbing
• Exact cause is unknown
  • Immune response to Malassezia furfur
  • Active sebaceous glands
SEBORRHEIC DERMATITIS

• Risk factors
  • Decreased frequency of hair washing
  • Build up of hair products on the scalp can cause irritation
  • Oils on the scalp can mask the scaling and result in more irritation
SEBORRHEIC DERMATITIS

• Treatment
  • Recommend appropriate hair cleansing interval
    • Wash out potentially irritating hair products as soon as possible
  • Anti-dandruff shampoos
    • Caution as several can be very drying to the hair
    • Use only on the scalp and rinse out completely
    • Follow with regular moisturizing shampoo and conditioner to hair
  • Use hair oils on the hair shaft only
SEBORRHEIC DERMATITIS

- Treatment
  - Topical steroids
    - Prescription oil or ointment-based topical steroids preferred
    - Alcohol-based solutions can be drying and not conducive with hairstyling practices
    - Quick drying aerosolized foams may be acceptable
CONCLUSION

• Hair styles among communities of color are varied
• Hair style is based on hair characteristics and individual preferences
• Understanding different hair care practices can help dermatologists have more meaningful and impactful discussions with patients
• Important to understand the unique approaches to management of seborrheic dermatitis in skin of color