Race, Ethnicity, Culture All Affect Hair Aging

Intrinsic and extrinsic causes of hair aging differ among race and ethnicity.

For example, hair graying with age is universal, but its average age of onset varies with race. On average, White individuals start to go gray in their mid-30s, Asian individuals in their late 30s, and Black individuals in their mid-40s.

There also are different presentations among ethnicities of common hair concerns. A White patient seeking recommendations on what to do about damaged hair is more likely to experience damage at the distal hair shaft. A Black patient with the same complaint would be more likely to present with damage closer to the hair root.

Understanding these differences and why they occur can lead to more informed, culturally sensitive recommendations for treating and managing hair aging concerns, according to a review of studies published earlier this year in the Journal of Clinical and Aesthetic Dermatology.

Study author Neelam Vashi, MD, founder and director of the Center for Ethnic Skin, director of the Cosmetic and Laser Center, says conducting the review helped to qualify and quantify what she sees in the clinic when Black, Asian, Hispanic, or White patients present with hair aging concerns. “There is very little published on hair aging in different ethnicities,” she says. “I really wanted to better understand the differences that we visibly see.”

INTRINSIC HAIR AGING

Intrinsic hair aging includes the natural physiological changes that happen with time, according to the authors.

“Intrinsic aging is what we are born with,” Vashi says. “It is dependent on the genes that we inherit from our parents, and it is also what we’re made of—our ethnicity and background.”

Hair graying is associated with aging and the decline in melanocytes thought to happen naturally with age. “I have had some patients come in because they felt like they were graying too early,” she says.

Not only is average age of graying onset different among ethnicities, but so is what is considered to be premature graying. “Graying is premature...at different times in different
populations. It is at about age 20 in [White individuals], 25 in Asians, and 30 in [Black individuals],” Vashi says. “A lot of the differences can be attributed to pigment.”

This is important to know when addressing patient expectations and concerns, she says. “If someone is an age where...hair loss is premature, then we can be more aggressive possibly in the medications we use and advise them to follow up with us,” she says.

There also are structural differences in hair that can affect how hair ages among ethnicities. The average diameter, or thickness, of Asian hair is 80 to 120 μm, compared with 65 μm in White hair and 55 μm in Black hair. The average diameter of Hispanic hair tends to fall between that of Asian and White.

White individuals have the highest hair density among the ethnicities studied. Black individuals have the lowest. Asian individuals have hair density that falls somewhere in between. The review authors did not have enough data on Hispanic hair density.

Black individuals have the lowest growth rate of hair but the highest eumelanin content. Breakage is increased or faster in this hair type. This group also has smaller hair cuticles than other ethnicities.

And although the hair shaft shape in White individuals is cylindrical, it is ellipsoid or flattened in Black individuals, circular in Asian individuals, and cylindrical and circular in Hispanic individuals.

**EXTRINSIC HAIR AGING**

The more manageable and controllable hair aging factors are extrinsic, including environmental exposures and physical stress from grooming practices. “Oxidative damage of the hair that can be caused by ultraviolet light and chemicals can change the quality and quantity of our hair,” Vashi says. “Chemicals, like hair dye or products for hair straightening, can cause damage to the hair fiber. Smoking can increase the rate of hair aging.”

In fact, studies have shown that the risk of hair graying is nearly twice as high in smokers vs nonsmokers, according to the review.

“There is a component of extrinsic aging related to different cultural practices. It’s not just how you were born and your genetics but also your culture and what you do,” she says.

For example, the findings that Asian and White individuals present with more distal hair damage at the hair shaft and Black individuals with damage closer to the hair root is due not only to the structure of hair but also extrinsic factors, such as cultural hair care practices, according to Vashi.

“Patients have come to me who say their hair just stopped growing,” Vashi says. “They think there is something wrong with them. There is nothing wrong with them. The hair is growing but when a break happens it is in a different hair. There is 1 hair that is growing and another that is
breaking. If the breakage is happening faster, there is a visible perception that there is no hair growth.”

There are things patients cannot avoid as they age, including graying and hair density decreases. But there are general and culturally specific changes and practices that can prevent premature hair aging. Among those strategies that health care providers can recommend are appropriate grooming habits; careful hairstyling; better choices for shampoos, conditioners, and leave-in products; better hair coloring choices; and medical therapies to treat underlying conditions, according to the study authors.

“If we can practice better hair styling regimens or if we can advise our patients to, then the aspect of breakage may at least improve,” Vashi says. “Then [there is] the perception of hair is that it is longer and growing more.”

Some examples of recommendations include telling White patients with hair damage to avoid hot straighteners. Black patients with hair damage also should avoid harsh chemicals in hair care products such as chemical relaxers, and they should use healthier hairstyling practices.

“Unique hairstyles, such as cornrows, tight hair ties, braiding, and weaves, common in individuals with African hair, create traction on the scalp, yielding traction alopecia,” the authors wrote. “Furthermore, as African hair exhibits tight coiling, everyday washing, combing, and grooming practices increase knot formation and lead to a high prevalence of fractures along the hair’s length.”

Interestingly, cosmetic products to bleach, color, perm, or straighten hair can affect hair types differently. For example, Asian hair tends to be more resistant to straightening treatments than White and Black hair. Asian hair has larger amounts of integral lipids, fatty acids, cholesterol, and wax esters than other hair, which makes Asian hair less susceptible to ultraviolet damage, according to the review.

Hair dyes can cause allergies and damage hair, according to Vashi. “There are certain components of hair dyes that can act as allergens,” she says. “I don’t tell patients to stop dyeing their hair, but I advise on safe procedures and to avoid anything that is causing pain, itching, or burning on the scalp. We are only born with so many hair follicles. Once a hair follicle scars down or goes away, that’s it.”

Vashi says she offers patients patch testing to determine which hair dye ingredients might be causing a reaction and gives them an alternative recommendation.

Hair dyes are not the only culprits. Some relaxers or hot hair styling treatments can cause burns that permanently damage the hair follicles, Vashi notes.

“Hair is such an important aspect of how people and patients perceive themselves,” Vashi says. “Cross-culturally, there are certain aspects of the appearance of hair that are considered to be beautiful. We also have a population that is aging but wants to maintain a youthful, vibrant
appearance. A lot of what we can do is to counsel, make hair care recommendations, offer treatments, and set expectations in a culturally sensitive way.”