Ashiness

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Dry skin occurs throughout the year, but for many people it’s most prevalent and problematic in winter. Cold temperatures, low humidity, and strong, harsh winds deplete the skin of its natural lipid layer, which would normally help keep the skin from drying out. Skin of color in particular, can become very flaky, dry, and "ashy" in the winter. Differences in the stratum corneum barrier in skin of color may contribute to the propensity toward ashiness.

The barrier function of the skin depends on the structure of the corneocytes, lipid content, and transepidermal water loss. Compared with skin in white people, black skin has more corneocyte layers and a more compact stratum corneum with greater intercellular cohesiveness. The epidermal barrier in darker skin has been shown to be stronger when exposed to mechanical or chemical challenge. Although the size of the individual corneocytes is the same in black and white skin, the desquamation rate in certain locations is higher in black skin. This is likely due to increased desquamatory enzyme levels such as cathepsin L2 in the lamellar granules of darker pigmented individuals leading to an ashy manifestation of the skin.

Black skin also has the highest sebum content of all ethnicities, but has the lowest ceramide level, and is thus the most susceptible to transepidermal water loss and xerosis of any ethnic group. Of note, one study has shown that the use of a certain type of fatty acid body wash or a synthetic "syndet" bar reduced ashiness.

Although no large, multietnic group studies have been performed to examine the skin barrier physiologic properties and their relation to clinical signs of disease, these small studies do shed light on some of the ethnic variation in skin barrier function.

In clinical practice, these small variations should play a role in personalized treatment regimens for common conditions such as acne and atopic dermatitis. In my practice, black patients with acne often have high sebum content, but they cannot tolerate drying medications such as benzoyl peroxide because of their skin sensitivity and intolerance to skin drying. These patients often also present with ashy, dry skin in certain areas, and oily, acne-prone skin in other areas, leading to more complex skin care regimens. Understanding these basic concepts can help better tailor our basic skin treatments and education for skin of color patients in the winter and throughout the year.

http://www.edermatologynews.com/index.php?id=1059&tx_ttnews...ws%5D=236313&type=98&cHash=935cb2ca073b7103613603a34a68a870
Sources:


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