

# Top 5 Skin Diagnoses in Study Vary by Ethnicity

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MIAMI — Unique structural and functional differences between the skin of black and white patients might help explain differences in the top five dermatology diagnoses for each ethnicity.

"As diversity increases in the U.S., understanding these differences becomes important," said Dr. Amanda B. Sergay, a third-year dermatology resident at St. Luke's-Roosevelt Hospital Center in New York City.

Dr. Sergay and her associates, including principal investigator Dr. Andrew F. Alexis, retrospectively compared the diagnostic codes for 1,074 black and white patient visits treated at the Skin of Color Center at St. Luke's-Roosevelt Hospital Center, New York City, from August 2004 to July 2005. When ethnicity was unclear, the patient's own description was used.

Prior to this study, the most recent survey of cutaneous diseases in black Americans was published more than 2 decades ago (*Cutis* 1983;32:388-90). Dr. Sergay said during a presentation at an international symposium sponsored by L'Oreal Institute for Ethnic Hair and Skin Research. "The survey highlights the variability in skin disorders for which individuals of different racial/ethnic groups present to a dermatologist."

Acne vulgaris was the most common diagnosis in both groups (ICD-9 code 706.1). "The pathophysiology of acne is not thought to differ between races or ethnic-



Melasma is one of the dyschromia diagnoses. Dyschromia and acne accounted for almost half of all black patient visits.



Lower total hair density and number of hair follicles might explain the higher incidence of alopecia in black patients.

ities," she said at the symposium, which was also sponsored by Howard University.

Acne and dyschromia (code 709.09) are so common that they accounted for almost 50% of black patient visits (*Cutis*, in press: November 2007). Black patients also were commonly diagnosed with contact dermatitis and other eczema, unspecified cause (code 692.9), alopecia (code 704.0), and seborrheic dermatitis (code 690.1).

After acne vulgaris, the most common diagnoses in white patients were a lesion of unspecified behavior (code 238.2), benign neoplasm of the skin of the trunk (code 216.5), contact dermatitis or other eczema, and psoriasis (696.1).

Dyschromia and alopecia made the top 5 list for black patients but did not appear among the top 10 diagnoses for white pa-

tients, Dr. Sergay commented.

The dyschromia diagnoses included postinflammatory hyperpigmentation and melasma. "Postinflammatory hyperpigmentation is a common sequela of cutaneous injury or irritation in skin of color," Dr. Sergay said. Postinflammatory hyperpigmentation can also result from pseudofolliculitis barbae, which is more common among black patients because of structural differences in the hair follicle and shaft compared with white patients.

Fewer elastic fibers in black skin to anchor hair follicles to dermis might partially explain the higher incidence of alopecia among black patients (*Dermatol. Clin.* 1988;6:271-81). Chemical and physical hair care practices may also contribute. Other possible explanations are

the significantly lower total hair density and number of hair follicles among black patients, compared with white patients (*Dermatol. Clin.* 2003;21:595-600; *Arch. Dermatol.* 1999;135:656-8).

Racial variations in skin physiology may lead to differences in eczema prevalence, Dr. Sergay said. Black skin, for example, typically features a greater number of stratum corneum layers. "There is no consensus, however, about the propensity to develop eczema and race or ethnicity."

The single-center source of information is a limitation of the study, as well as potential selection bias from participating physicians, Dr. Sergay said. In addition, categorization of patient ethnicity by a physician or assistant is less reliable than self-reporting. ■

## Tips for Treating the Common Skin Disorders of Black Patients

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BUENOS AIRES — The five most common skin disorders of black patients can be effectively managed by understanding that not all skin types are treated the same, reported Dr. Susan C. Taylor at the 21st World Congress of Dermatology.

Acne is the most common dermatologic diagnosis seen in black patients. It is unlikely that racial differences affect the pathophysiology of acne, but histopathologically there may be racial differences in sebaceous gland size and activity, said Dr. Taylor, director of the Skin of Color Center at St. Luke's-Roosevelt Hospital, New York.

Inflammation has been seen in the facial comedones of black women, with marked inflammation observed in papular and pustular lesions, she said. "This probably explains why postinflammatory hyperpigmentation is such a huge problem in the black population with acne."

Hyperpigmentation is one of the primary complaints of black

patients who seek treatment for acne. "When we address treatment of acne in this population, it behooves us not only to treat the acne early and aggressively but also to treat the postinflammatory hyperpigmentation," said Dr. Taylor. Aggressive therapy must be balanced with the recognition that some topical therapies may be irritating to the skin, leading to further postinflammatory hyperpigmentation. Additional depigmenting therapy may be needed.

Maintenance therapy is advisable in order to prevent formation of new comedones that would lead to acne and postinflammatory hyperpigmentation. Sunscreens and sun protection are essential. "Many people of African descent do not readily embrace the use of sunscreens," she said. "It is very important for us to educate this particular population about the need for sunscreens, particularly as it relates to the stimulation of melanocytes and the production of melanin and further postinflammatory hyperpigmentation."

Acne treatment should include both topical and systemic therapies. "Keep in mind that many of

the topical treatments can be irritating to the skin, thereby increasing inflammation," said Dr. Taylor. Standard topical treatments for acne in black patients include benzoyl peroxide, topical antibiotics, and topical retinoids such as tretinoin, adapalene, and tazarotene. In an 18-week, double-blind, vehicle-controlled study, tazarotene 0.1% cream was found to be well tolerated and effective in the treatment of postinflammatory hyperpigmentation in darker-skinned patients with acne vulgaris (*Cutis* 2006;77:45-50).

Systemic antibiotics include erythromycin, tetracycline, doxycycline, and minocycline; however, minocycline should be used cautiously, as it may induce hyperpigmentation.

Hormonal treatment with oral contraceptives or spironolactone may be effective in some patients.

Postinflammatory hyperpigmentation is the most common pigmentary disorder and can occur at any site of earlier inflammation. The intensity and duration of the hyperpigmentation appears to be linked to the skin hue, affecting those with darker skin color to a greater extent than

those with lighter skin color.

Prevention is the most important factor concerning pigmentary disorders. Spot tests always should be performed before initiating cosmetic procedures such as laser therapy, chemical peels, or microdermabrasion in patients. "You never know when a patient is going to have dyschromia or hyperpigmentation," said Dr. Taylor. Remind patients who are susceptible to pigmentary disorders to use sunscreens regularly. For treatment of pigmentary disorders, 4% hydroquinones remain the gold standard, but retinoids can also be effective. Other agents include azelaic acid, kojic acid, and glycolic acid.

Compared with other racial groups, blacks appear to have higher rates of allergic contact dermatitis to thioureas, p-tert-butyl phenol-formaldehyde resin, cobalt chloride, and paraphenylenediamine, a component of dark hair dye. The higher paraphenylenediamine sensitivity may be related to more extensive exposure through the use of dark hair dyes, said Dr. Taylor.

In the treatment of eczema, "attention to skin care cannot be

overemphasized," she said. Emollients and bathing rituals can be helpful in alleviating symptoms. Topical corticosteroids and topical immunomodulators are recommended treatments.

Seborrheic dermatitis is a condition that appears to show no racial predilection, but the incidence is increased in patients with HIV or chronic neurologic conditions. It can affect the scalp, face, ears, and chest, causing scaling and pigmentary abnormalities.

Daily shampooing often is recommended for patients with seborrheic dermatitis. "This is not an option for patients of African descent, because of the structural differences of the hair, particularly the dryness, as well as cultural practices," she said, "most patients of African descent only shampoo once a week or once every other week, so you have to tailor your therapy appropriately."

Dr. Taylor has worked as a clinical investigator, speaker, or consultant for Allergan Inc., Beiersdorf AG, Dermik Laboratories, Galderma Laboratories, Medicis Pharmaceutical Corp., Stiefel Laboratories Inc., and Johnson & Johnson. ■