Racial/ethnic Variations in Acne: Implications for Treatment and Skin Care Recommendations in Skin of Color

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Background:

A national U.S. based ambulatory medical care survey showed that acne was the leading dermatologic diagnosis in all non-white populations studied, including African Americans, Asians, and Hispanics. [1] One study showed that clinical acne was more prevalent in African American and Hispanic women than in Continental Indian, Caucasian and Asian women. Differences in subtypes of acne were observed in Asian and whites and Post-inflammatory hyperpigmentation (PIH) was prevalent in 65% of blacks and 48% of Hispanics. [2] Given that PIH can occur as a sequela of acne itself, or as a complication of treatment, regimens must not only be aggressive enough to reduce inflammation and other pathogenic factors, but also well tolerated and include skincare so that irritation is avoided. [3] This project sought to help clarify the existing published data and provide consensus statements on acne presentation, prevention, treatment and maintenance in SOC populations to help improve patient outcomes.

Methods:

A panel comprised of seven dermatologists from the US and Canada (the authors) convened a virtual meeting on January 9, 2021, to address the following questions using a modified Delphi process [4]:

1) Are there racial/ethnic differences in acne presentation?
2) Is there a need for specialized approaches to therapeutic options and skincare in acne patients with skin of color?

Statements, intended for health care providers caring for acne patients and clinician-researchers, were developed based on the available literature and expert opinion of the panel.
Results:

The panel developed six consensus statements:

1. Post-inflammatory hyperpigmentation (PIH) is a common sequela of acne in SOC but can also occur as a result of irritation from topical acne treatments or procedural therapies. Given that PIH can occur as a sequela of acne or as a complication of treatment, regimens must be aggressive enough to reduce inflammation and well-tolerated to avoid irritation. Therefore, when considering a treatment and skincare regimen for the SOC patients with acne, individualized selection of a topical regimen to minimize irritation should take into account tolerability characteristics of the active ingredients and vehicle.

2. Dry skin is a common concern among patients with SOC and may be more visible or stigmatizing in richly pigmented skin.

3. Decreased ceramide levels have been demonstrated in the skin of African American individuals.

4. PIH in the SOC individual, left behind after the acne has cleared, can be as bothersome as the acne lesions themselves. The therapeutic endpoint of acne treatment in SOC includes the resolution of PIH and long-term control of underlying acne vulgaris.

5. Adjunctive skincare can play an essential role in the prevention, treatment, and maintenance regime of acne care. When selecting a cleanser and moisturizer for acne and acne-prone skin, individual and/or cultural variations in skincare preferences should be considered. Some skincare and haircare products that are commonly used in communities of color, such as cocoa butter and petrolatum, may exacerbate acne.

6. Particularly relevant to the management of acne in patients with SOC:
   - Dry skin and irritation commonly result from topical acne treatment or systemic retinoid therapy.
   - Non-comedogenic cleansers and moisturizers can improve dryness and irritation resulting from acne treatment. Favor aqueous gels, lotion, or cream vehicles.

7. Acne-affected skin has shown lower levels of ceramides, with profound reductions compared to healthy individuals of all ethnicities. Ceramides-containing moisturizers may enhance adherence and complement existing acne therapies.

Conclusions:

- Racial/ethnic differences in acne have been reported for clinical presentation and impact.
- Although data are limited by small sample sizes and varying methodologies, it seems that:
  - Sequelae from acne as well as iatrogenic complications are more frequent in SOC populations.
- Treatment regimens must reduce inflammation and other pathogenic factors, but they must also be well tolerated and include skincare so that irritation is avoided.
- Apply non-comedogenic moisturizer on top of prescription topical if dryness, stinging/burning is present.
- There are differences in therapeutic endpoint influencing the treatment choices.

Cultural variations in skin and hair care are to be considered for SOC populations to avoid triggering acne and to improve adherence to treatment.

References: