

Different shades of skin disease: Dermatology in skin of colour

By Arunima Sivanand and Dr Boluwaji Ogunyemi

Dermatologic conditions can present differently in skin of colour compared with white skin, so special attention should be directed to recognizing lesions early and managing them appropriately.



Different skin colours arise because of variations in melanin production. The Fitzpatrick skin phototype classification divides skin into types I–VI according to its response to sun exposure. Here, we discuss differences in disease presentation and management in skin of colour, as they relate to acne and atopic dermatitis. A brief discussion of skin cancer is also included.

Acne

Lesions of acne can range from comedones (whiteheads and blackheads) to inflammation (characterized by redness and pain), pustules (pus-filled bumps),



papules (raised red bumps) and cysts (larger bumps beneath the skin). The face, chest, shoulders and back can be affected.

Acne is the most common dermatologic condition in skin of colour. And while the causes and treatment of acne are similar across skin tones, the consequences can be different. Acne in darker skin often leads to postinflammatory hyperpigmentation (PIH), or darkening of the skin. PIH occurs at a higher rate in black, Hispanic and Asian individuals compared with white people, and is often the reason individuals first seek care. Keloids, or overgrowths of scar tissue, are also

common residual effects of acne in skin of colour.

First-line treatments for acne in skin of colour include topical retinoids and antibiotics. Retinoids are especially useful because they can help with the associated PIH. However, low concentrations should be used to prevent irritant contact dermatitis that may itself cause PIH. Antibiotics for acne are another option and, when used topically, are often combined with benzoyl peroxide.

Topical azelaic acid has also been found to be effective in reducing acne lesions and treating PIH. Adjunct treatments, including hydroquinone and kojic acid, may also be used to treat PIH. An important preventative step for those affected is to avoid

picking or scratching acne lesions, as this can cause PIH and scarring.

One variant of acne that is more common among black and Hispanic individuals due to cultural practices is pomade acne. Pomade acne occurs with the use of occlusive lubricating products such as hair pomades or oils on the scalp and facial hair, resulting in closed comedones or whiteheads. Preventative measures involve stopping using the product or switching to less comedogenic formulations.

Eczema

Eczema, or dermatitis, refers to a group of inflammatory skin disorders. Eczema classically presents as itchy, dry, red, raised lesions on the skin. In darker skin tones, the lesions can

be grey or brown in colour. Eczema is the second most common skin disease in individuals of African descent. Because changes in skin colour are less obvious in heavily pigmented versus white skin, practitioners should consider relying more on palpating the skin for warmth as a marker of active eczema.



Atopic dermatitis is a form of eczema that typically presents at a young age as scaly, dry lesions that itch considerably and, with chronic rubbing, lead to lichenification (pronounced skin markings). Atopic dermatitis appears to be more common among black, Asian and Pacific Islander populations than among white populations. Older children and adults with white skin tend to have lesions predominantly in flexural areas, such as the crease of the elbow and the back of knee. In those with darkly pigmented skin, however, the reverse pattern is often seen, with the extensor aspects of the elbows and knees affected.

A specific concern in skin of color is that scratching lesions can lead to either PIH or hypopigmentation (lightening of the skin), both of which can be long lasting. Pigmentary changes typically remain long after the eczema has resolved, making early detection and treatment paramount.

Another variant of eczema that is seen more commonly in dark compared with lighter skin is papular eczema, which presents with small, raised bumps on the skin. Also more common is eczema with follicular prominence, where lesions surround the hair follicles.

Skin cancer

Melanoma is a type of skin cancer that typically presents as pigmented lesions. White people are up to 20 times more likely than black people, and up to seven times more likely than Hispanics, to be diagnosed with melanoma. However, black and Hispanic individuals often present with more advanced disease and subsequently experience significantly greater morbidity and mortality. This is thought to be due, at least in part, to a reduced suspicion for skin cancer among both physicians and individuals with skin of color.

In people with lightly pigmented skin, exposure to UV radiation is a major risk factor for melanoma,

squamous cell carcinoma and basal cell carcinoma, and these skin cancers often present in areas of the skin that have been exposed to the sun. In skin of colour, risk factors such as chronic scars and inflammatory lesions are more predominant. In those with heavily pigmented skin, melanoma is far more likely to present on sun-protected areas such as beneath the surface of the nails, in the oral and genital mucosa or on the soles of the feet and the palms of the hands. Therefore, when conducting their own skin examinations, people of colour should carefully examine these regions for lesions that might be suspicious of skin cancer.



Basal cell carcinoma (BCC) is the most common skin cancer in white, Hispanic and East Asian populations. Because UV radiation is the major risk factor for BCC and darker skin is protective in this regard, BCC is significantly lower in individuals with skin of color. BCCs typically present as pink, pearly, raised bumps that bleed easily. BCCs in skin of colour are more likely to be pigmented than those in lighter skins.

Conclusion

Common dermatologic conditions can present differently in individuals with different skin colours. Ensuring that you and your dermatologist appreciate these differences is crucial in ensuring that skin conditions are recognized in a timely manner and that nuances in management are appropriately considered. 

Arunima Sivanand is a medical student at the University of Toronto.

Dr Boluwaji Ogunyemi is a dermatologist in St. John's, Newfoundland and Labrador, and a clinical associate professor of medicine at Memorial University of Newfoundland.

Melanoma FACTs

White people are 20 times more likely than black people to be diagnosed with melanoma.

20

And seven times more likely than Hispanic people to be diagnosed with melanoma.

7