

## DERMATOLOGICAL CONDITIONS IN SKIN OF COLOR

Dermatological Conditions in Skin of Color is a column that provides insight on the different presentations, misdiagnoses, and other challenges that patients with skin of color can present with at the dermatology office.

# The Psychosocial Toll of Dyspigmentation

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## INTRODUCTION

Post-inflammatory hyperpigmentation (PIH) is a pigmentary response in the skin resulting in hypermelanosis within the affected areas of previous inflammation, rash, or trauma. There is a disproportionate prevalence of PIH across Fitzpatrick III and above skin types, and although benign in nature, the psychosocial burden can be devastating. Dyspigmentation is not merely cosmetic, it carries significant psychological morbidity that integrated dermatologic and mental health approaches have undervalued.<sup>1</sup> Whether it be a lack of education or proper representation of skin of color (SOC), there is a significant disparity of understanding the psychosocial toll secondary to not only to dyspigmentary disorders, but also across inflammatory dermatologic conditions leading to PIH. Because of this, quality of life diminishes, which then leads to detrimental side effects such as depression, low self esteem, anxiety, or shame.

## WHAT IS DYSPIGMENTATION?

Dyspigmentation occurs from dysregulation of melanin, which leads to excess or reduced pigment within the epidermis.<sup>2</sup> These skin changes can be caused by many skin conditions such as acne, eczema, psoriasis, and inflammation or trauma to the skin. These are common triggers we see daily. In SOC patients, these post-inflammatory hyper or hypopigmentation changes can be more chronic and clinically evident. Even though the underlying skin condition is resolved, extrapigmentary changes are one of the most

common skin findings we see in dermatology.<sup>3</sup> Especially in SOC patients, PIH lasts longer and is taxing. Darker skin types produce more melanin, and even minor injuries can prolong pigmentation. PIH typically persists in darker skin types, with constant or repeated exposure. Often, healing gets delayed with inadequate treatment or UV exposure and no sun protection.<sup>3</sup>

## CLINICAL AND PSYCHOSOCIAL IMPACT OF POST-INFLAMMATORY HYPERPIGMENTATION IN SKIN OF COLOR

When there is increased melanin activity in Fitzpatrick III to VI, this leads to more prominent and lingering dermatologic changes.<sup>4</sup> When the body has a heightened response, the skin reciprocates by showing pigmentation. PIH often has a greater impact in patients with SOC, as pigment changes can be more noticeable and might last longer.<sup>4</sup> This longer pigmentation not only affects the quality of life, but also the mental health of each patient. It can be mentally, physically, socially, and spiritually more exhausting. PIH is persistent in general, let alone in SOC patients. Lack of access to dermatologic care and underrecognition can worsen the struggle of dyspigmentation.<sup>5</sup> Limited representation of Fitzpatrick types III to VI not only affects the treatment of care, but it can also affect delays in treating pigmentation. Healthcare disparities and limited representation in dermatologic research and training can contribute to gaps in the diagnosis, treatment, and long-term management of

patients with SOC. Sociocultural factors might shape how patients perceive, experience, and cope with pigmentary disorders. This leads to a cascade effect of how people feel about themselves and are viewed in society. Visible pigmentary changes might negatively affect self-perception and body image. Patients might feel more self-conscious and perceived social stigma to these noticeable pigmentary changes. In many cultures, having a clear, even skin tone is tied to beauty and confidence. Pigmentation can impact people's skin socially.

## POST-INFLAMMATORY HYPERPIGMENTATION & QUALITY OF LIFE

PIH can have a direct impact on a person's mental health and confidence, because it can feel as though this is the first thing that others see when in public spaces or when interacting with the world around them. This can be distressing since the most affected areas are not so easily concealed, ie, the face. Additionally, for those without the proper knowledge of its origin, there is associated anxiety regarding whether there is an underlying worsening disease. In a study among 200 undergraduate Nigerian female students with varying degrees of acne and acne-induced PIH, 15% were experiencing increased anxiety secondary to their acne. There were also significant findings found regarding lower self-esteem amongst those with severe acne only.<sup>6</sup> There are additional quality of life studies that have shown reduced self-esteem and an increased tendency toward introversion within young

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adults suffering from acne, with PIH creating additional psychological distress.<sup>7</sup>

The Dermatology Life Quality Index (DLQI) study focused on the correlation between PIH and other dyschromia related diagnoses, comparing gender, race, level of education, age, and differing Fitzpatrick skin types. The most substantial impact on quality of life aligned with groups with higher DLQI scores. The results showed that women were negatively impacted at a higher degree socially and psychologically compared to men, and those with higher DLQI scores were more likely to have a significant impact on quality of life, including PIH, melasma-diagnosed individuals, and Fitzpatrick III–VI skin types. The most striking correlation found was for individuals with higher DLQI scores, there was a tendency to have higher out of pocket monthly costs, for lightening prescriptions and associated products.<sup>8</sup> This matters, because we are seeing a negative impact on quality of life among not only young adults, but also the pediatric population as well as across other dermatology conditions that can result in PIH.

Atopic dermatitis is a common condition prevalent across all ethnic populations and varying demographics from infancy through adulthood.<sup>9</sup> The degree of dyspigmentation following an eczema flare can depend on numerous contributing factors, including the severity of the condition and the skin type of the affected individual, just to highlight a few. The associated post-inflammatory pigmentary change following a previously inflamed area can have a similar significant impact on quality of life.<sup>10</sup> Not only can we see PIH secondary to atopic dermatitis, but it can appear subsequent to numerous inflammatory and noninflammatory dermatological conditions.

### CLINICAL VIGNETTES ACROSS DERMATOLOGY CONDITIONS

Similar dyspigmentary struggles can be seen across other dermatologic conditions such as psoriasis, contact dermatitis, or even elective procedures. During the first months following initiation of ixekizumab, a 50-year-old patient presented with new lentiginous lesions in previously affected sites of psoriasis. Following biopsy, the results described PIH and lentiginosities.<sup>11</sup> We can also see unintentional PIH following initiation of topical acne treatments

resulting in irritant contact dermatitis,<sup>12</sup> or PIH following chemical peels and/or laser surgery.<sup>13</sup> These results can be incredibly disheartening for patients who have been battling PIH for months to years and now are forced to face an additional challenge. The trust built between the patient and their clinician can suffer as well. This is why it is also important to prioritize conservative measures initially and titrate as tolerated when treating PIH, as irritation can delay desired results and lead to worsening outcomes.

### GAP IN DERMATOLOGY CARE

Dermatology is one of the specialties in medicine with a lack of diversity with regard to the patient population.<sup>4</sup> There is not enough education or training materials for providers and patients. Limited educational resources and clinical exposure can lead to misdiagnosing and delayed or improper treatment with patients of SOC. The skin is the biggest organ in the body, so it makes sense that it would have such a high impact on quality of life and psychosocial effects. With all of this in mind, skin disorders remain underrecognized today in dermatology.<sup>14</sup> This leads to underscreening for mental health, despite the known relationship between skin disease and psychological factors. Dermatology visits are often short, 15 minutes or less. As providers, we need to tackle diagnoses, treatment plans, and procedures. This leads to little time left for quality of life screening, mental health discussion, and counseling. There is also a lack of presence for SOC in dermatology resources. Improving representation in education, clinical training, and research might strengthen patient outcomes by increasing recognition of disease presentations across diverse skin types, supporting earlier diagnosis, and improving treatment plans.<sup>15</sup> Addressing these gaps in dermatology are essential to improve patient care.

### WHY THIS MATTERS: EVIDENCE OF MENTAL HEALTH IMPACT

Unfortunately, the psychosocial implications linked to the presentation of dyspigmentation can directly affect the patient's quality of life and behavior including, but not limited to, sense of identity, visibility, emotional and social life impact, and overall presence.<sup>16</sup> This is easily seen across not only dyschromia disorders, but across many other inflammatory

dermatologic conditions. As a result, increased depression, anxiety, embarrassment, and shame is prevalent especially among adolescents and disproportionately affects those with darker skin types.<sup>17</sup> The priority of treating PIH in a safe and timely fashion cannot overshadow the dermatologic mental health concern that closely arises with it. These findings show that treating the pigment alone is not sufficient. Incorporating integrated care that also assesses mental health is equally important.

### THE CASE FOR INTEGRATED CARE

One cannot practice dermatology without taking into account the mental health concern associated with cutaneous diseases.<sup>18</sup> Dermatology and psychological impact go hand in hand. As a provider, you cannot only treat one system; they all intertwine and have a direct relationship with one another. There is often a mutual connection between skin disease and emotional burden.

It is important, as providers, to create an open and safe space to initiate these conversations.<sup>17</sup> Even though mental health might not always present with visible symptoms like those seen on the skin, that does not diminish its importance. Mental health is not always easily detected, but despite this, it can have a large, if not greater, impact on quality of life, daily activities, and emotional wellbeing. Incorporating different specialties such as dermatology and psychiatry should be standard in providing high quality patient care.<sup>14,19</sup> There are screening tools, such as the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder-7 (GAD-7), that should be used with patients who have long-standing skin conditions.

Screening does not always have to be rigid or guideline driven; it can just be as simple as initiating a conversation and being present. These psychosocial factors can also negatively impact patient compliance if not addressed. Prompt recognition and referral can improve disease management strategies. By addressing patient concerns and supporting their wellbeing, this approach strengthens patient-provider trust. Normalizing mental health discussions is a crucial part of understanding the full clinical picture. Managing a patient's wellbeing is an important part of holistic dermatology care.<sup>20</sup>

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### PRACTICAL SOLUTIONS FOR PROVIDERS

Early intervention and setting expectations are part of the treatment process. This is vital to limit the progression of PIH.<sup>21</sup> Validating patients' matters such as "I see how this is affecting you" will not only make them feel heard but also prevent feelings of being just another number. Screening with 1–2 questions goes a long way. As clinicians, in the midst of balancing our duties while practicing to the best of our ability, we can sometimes falter on prioritizing our patient's experience and the levity of their concerns. Making these intentional changes in dermatology can build trust, strengthen the relationship, and help validate patient frustration. From the patient's perspective, there is unfamiliarity with common dermatological conditions that we see on a daily basis, sometimes multiple times a day, and it is our responsibility to convey how to manage their corresponding needs. The subject of PIH, for example, can take a long period of time to heal. It can linger for months to years, especially in darker skin types. The treatment is usually daily use of sunscreen in combination with topical agents such as retinoids, niacinamide, cosmetic intervention, and pigment-modulating therapies.<sup>21</sup> This can be a lot to introduce into a patient's routine, especially if the diagnosis is new to them. It's important to provide an open ear to allow our patients to express their concern, not only in managing PIH, but also building rapport with our patient base as a whole.

### CONCLUSION

Dyspigmentation is not just a cosmetic skin condition—it branches much deeper. It can negatively contribute to a patient's wellbeing. It often carries with it a psychosocial burden that can often lead to reduced confidence and self-esteem, which indirectly impacts a patient's wellbeing mentally, emotionally, and psychosocially. PIH lasts longer in darker skin types since the skin has more melanin and injuries last longer. As a result, it is often overlooked and undervalued, which then leads to inadequate and/or inappropriate treatment. It is important that as providers we call for change promptly. It is our duty to be proactive, ask important questions, treat beyond the skin,

and realize that the patient is not a number. By continuing to screen, refer, and validate patients, this will close the gap in care. As clinicians, we need to push our field forward by collaborating not only within dermatology, but with other specialties to see the whole picture. At the end of the day, the patient is our priority, and it is our duty as clinicians to approach each individual we see holistically. We must treat the patient, not just the pigment.

### REFERENCES

1. Delphine Kerob Kerob, Thierry Passeron, Alexis A, et al. 54772 Pigmentary disorders, prevalence, impact on quality of life and social stigmatization: results of the first large international survey. *J Am Acad Dermatol*. 2024;91(3):AB280–AB280.
2. Grimes PE. Management of hyperpigmentation in darker racial ethnic groups. *Semin Cutan Med Surg*. 2009;28(2):77–85.
3. Kashetsky N, Feschuk A, Pratt ME. Post-inflammatory hyperpigmentation: A systematic review of treatment outcomes. *J Eur Acad Dermatol Venereol*. 2024;38(3):470–479.
4. Mar K, Khalid B, Maazi M, et al. Treatment of post-inflammatory hyperpigmentation in skin of colour: a systematic review. *J Cutan Med Surg*. 2024;28(5):473–480.
5. Buster KJ, Stevens EI, Elmetts CA. Dermatologic health disparities. *Dermatol Clin*. 2012;30(1):53–59, viii.
6. Akinboro AO, Olasode OA, Onayemi O, Mejiuni AD. The impact of acne and facial post-inflammatory hyperpigmentation on quality of life and self-esteem of newly admitted Nigerian undergraduates. *Niger J Clin Pract*. 2018;21(3):386–392.
7. Kaufman BP, Aman T, Alexis AF. Postinflammatory hyperpigmentation: epidemiology, clinical presentation, pathogenesis, and treatment. *Am J Clin Dermatol*. 2018;19(4):489–503.
8. Maymone MBC, Secemsky EA, Widjajahakim R, et al. Assessing the safety of superficial chemical peels in darker skin: a retrospective study. *J Am Acad Dermatol*. 2018;79(3):508–513.e2.
9. Nelson S. The science of eczema on brown and black skin. National Eczema Association. 20 Sept 2022. Accessed 20 April 2026. <https://nationaleczema.org/blog/the-science-of-eczema-on-darker-skin/>
10. Kamp E, Ascott A, George SMC. Eczema severity scoring in skin of color: a review of outcome measures and clinical implications. *J Invest Dermatol*. 2025;145(4):735–748.
11. Santa María P, Valenzuela F, Morales C, et al. Lentiginous eruption in resolving psoriasis plaques during treatment with ixekizumab: a case report and review of the literature. *Dermatol Rep*. 2017;9(2):7079.
12. Sangha AM. Managing post-inflammatory hyperpigmentation in patients with acne. *J Clin Aesthet Dermatol*. 2021;14(6 Suppl 1):S24–S26.
13. Davis EC, Callender VD. Postinflammatory hyperpigmentation: a review of the epidemiology, clinical features, and treatment options in skin of color. *J Clin Aesthet Dermatol*. 2010;3(7):20–31.
14. Gupta MA, Gupta AK. Current concepts in psychodermatology. *Curr Psychiatry Rep*. 2014;16(6):449.
15. Syder NC, Omar D, McKenzie S, et al. Gaps in medical education curricula on skin of color in medical school, residency, and beyond: Part 1. *J Am Acad Dermatol*. 2023;89(5):885–892.
16. Darji K, Varade R, West D, et al. Psychosocial impact of postinflammatory hyperpigmentation in patients with acne vulgaris. *J Clin Aesthet Dermatol*. 2017;10(5):18–23.
17. Chugh R, Treasure K, Adelman M, et al. The psychosocial burden of hyperpigmentation in Fitzpatrick skin types IV to VI. *Int J Res Dermatol*. 2026;12(1):97–103.
18. Mar K, Rivers JK. The mind–body connection in dermatologic conditions: a literature review. *J Cutan Med Surg*. 2023;27(6).
19. Sun MD, Block BR, Ohri S, Rice T. From psyche to skin: a call for interdisciplinary care in the management of psychodermatologic conditions. *J Clin Aesthet Dermatol*. 2025;18(3):67–70.
20. Baskaran N, Arunima A, Shah S, et al. Psychological morbidity in chronic dermatological disorders: a review. *Indian Dermatol Online J*. 2025;16(3):381–388.
21. American Academy of Family Physicians. Dermatologic conditions in skin of color. 2023.
22. Tsai J, Chien AL. Photoprotection for skin of color. *Am J Clin Dermatol*. 2022;23(2):195–205.

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