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### Postinflammatory hyperpigmentation: A comprehensive overview: Epidemiology, pathogenesis, clinical presentation, and noninvasive assessment technique.

*Silpa-Archa N, Kohli I, Chaowattanapanit S, Lim HW2, Hamzavi I. J Am Acad Dermatol. 2017 Oct;77(4):591-605. doi: 10.1016/j.jaad.2017.01.035.*

#### **ABSTRACT**

Postinflammatory hyperpigmentation (PIH) commonly occurs after various endogenous and exogenous stimuli, especially in dark-skinned individuals. PIH is one of the most common complications of procedures performed using laser and other light sources. The severity of PIH is determined by the inherent skin color, degree and depth of inflammation, degree of dermoepidermal junction disruption, inflammatory conditions, and the stability of melanocytes, leading to epidermal and dermal melanin pigment deposition. The depth of melanin pigment is the key factor to predict prognosis and treatment outcome. Epidermal hyperpigmentation fades more rapidly than dermal hyperpigmentation. Various inflammatory disorders can eventually result in PIH. The evaluation of pigmentation using noninvasive tools helps define the level of pigmentation in the skin, pigmentation intensity, and guides therapeutic approaches. This first article in this 2-part series discusses the epidemiology, pathogenesis, etiology, clinical presentation, differential diagnoses, and investigation using noninvasive assessment techniques that objectively determine the details of pigmentation. Copyright © 2017 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved. **KEYWORDS:** colorimetry; hyperpigmentation; hyperspectral imaging; melanin; melanocytes; photography; racial/ethnic; reflectance confocal microscopy; reflectance spectroscopy; skin phototypes  
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