Subclinical melasma: Determining disease extent

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CLINICAL CHALLENGE

Melasma is a common disorder of hyperpigmentation that can be exacerbated by ultraviolet light exposure and the use of certain treatment modalities. Because of this, proper patient counseling regarding disease extent and course of treatment is critical. Given the difficulty of appreciating disease in those with more subtle findings, the use of Wood's light has been suggested but not analyzed as an aid in diagnosis.[1] To better understand the true utility of the additional use of Wood's light examination in evaluating disease extent, we chose to quantify melasma lesions in a study approved by the Boston University Institutional Review Board.

SOLUTION

Clinical examinations, with and without the use of Wood's light, were performed in 35 adults; the modified Melasma Area and Severity Index (mMASI) was used to quantify findings (Fig 1). The Mann-Whitney-Wilcoxon

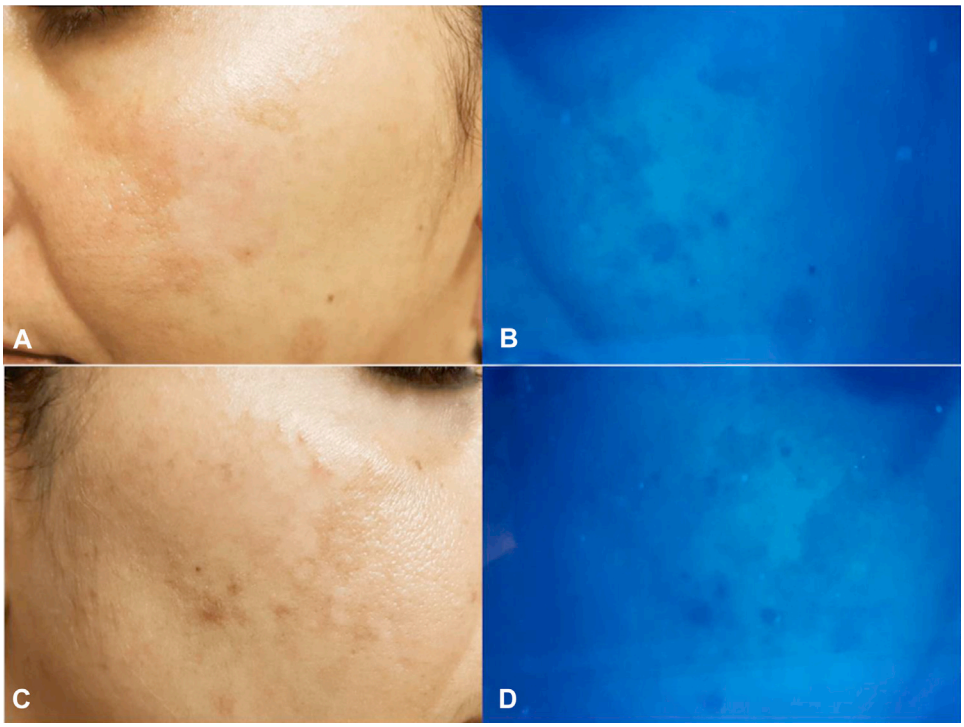

Fig 1. Melasma with and without the use of Wood's light. Photographs show (**A**) left face without Wood's light, (**B**) left face with Wood's light, (**C**) right face without Wood's light, and (**D**) right face with Wood's light.

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test was used to compare the mean of mMASI scores with and without Wood's light examination. Modified MASI was 4.95 (standard deviation [SD], 2.95) in visible lighting compared with 6.13 (SD, 2.74) under Wood's light (P = .03). In patients with hydroquinone usage, mMASI was 4.96 (SD, 2.10) in visible lighting compared with 6.27 (SD, 2.40) under Wood's light (P = .04). Although the accuracy and utility of melasma depth assessment with the use of Wood's light have been debatable,[2] we found a statistically significant increase of mMASI scores with Wood's light assessment when used to examine for subclinical disease. With Wood's light use, patients can be counseled on proper medication application and informed that these areas of subclinical disease can worsen with sun exposure and if certain treatment modalities such as light and laser devices are used.

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