Reliability, Validity, and Sensitivity to Change Overtime of the Modified Melasma Area and Severity Index Score


Abstract:

BACKGROUND The new modified Melasma Area and Severity Index (mMASI) score, the recently used outcome measure for melasma, has not been tested to determine its sensitivity to change in melasma. OBJECTIVE To determine the reliability, validity, and sensitivity to change overtime of the mMASI score in assessment of the severity of melasma. METHODS Pearson correlation, Cronbach alpha, and intraclass correlation coefficient were calculated to assess the reliability of the mMASI score. Validity of the mMASI scale was carried out using Spearman correlation between mMASI total score (before and after treatment), clinical data, and patient’s responses. RESULTS The mMASI score showed excellent reliability and good validity for assessment of the severity of melasma. The authors also determined that the mMASI score demonstrated sensitivity to change over time. CONCLUSION An excellent degree of agreement between the mMSAI and MASI scores was revealed. The mMASI score is reliable, valid, and responsive to change in the assessment of severity of melasma. Moreover, the mMASI score was found to be easier to learn and perform and simpler in calculation compared with the MASI score. Overall, the mMASI score can effectively replace the MASI score.

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