

Massachusetts Neurologic Association

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CALL FOR ABSTRACTS

Deadline for submission: January 31st, 2017

Submit to: mna@mms.org

The Poster Presentation Session at the MNA Spring Meeting aspires to allow residents and fellows in training to present their research or interesting cases in a poster session. Please follow the following abstract guidelines:

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Title: Agreement analysis comparing iPad LCVA and Sloan testing in multiple sclerosis patients

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Abstract:

(There is a limit of **350** words for your abstract submission).

Background: Visual symptoms are common in multiple sclerosis (MS). Low-contrast visual acuity (LCVA) testing using Sloan charts has demonstrated increased sensitivity for visual deficits compared to high-contrast acuity testing. Computerized testing of visual acuity may facilitate use in the clinic setting.

Objectives: To evaluate the agreement between an iPad-based versus Sloan testing of LCVA in a cohort of MS patients.

Methods: 38 patients with relapsing-remitting MS were enrolled after providing informed written consent at Partners MS Center, Brigham and Women's hospital. Monocular LCVA was measured using Sloan and iPad-based LogMAR charts. Number of correct letters and agreement between two measurements, were assessed for each eye using Bland-Altman analysis and paired t-test.

Results: For both eyes, there was no significant difference in number correct between the two measurements using a paired t-test, and there was high correlation between two measurements (OD $r=0.89$, $p<0.001$; OS $r=0.78$, $p<0.001$). The limits of agreement were -7.9 to $+8.5$ letters for the right eye and -10.9 to $+11.2$ letters for the left eye.

Conclusion: An iPad-based LCVA test shows good agreement with Sloan testing in MS patients.