Use of the Cogan lid twitch to identify Myasthenia gravis

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Purpose: To evaluate the reliability of the Cogan Lid Twitch test in a neuro-ophthalmology clinic

Methods: Cogan Lid Twitch testing was performed on adult patients presenting to the neuro-ophthalmology clinic by the neuro-ophthalmologist. The patients were instructed to look straight ahead, up, down and straight ahead again. The upper eyelids were carefully evaluated immediately following this movement for the presence of a brief upward twitch of the upper eyelid, which would indicate a positive Cogan Lid Twitch Test. The test was repeated as needed. We evaluated the findings from the ophthalmology examination along with results of available tests such as serologic findings, MRI's and CT’s.

Results: Of 117 patients evaluated, 24 patients were found to have Myasthenia Gravis, and 18 of these patients had a positive lid twitch. Of the 98 patients who did not display a positive Cogan twitch, 6 had Myasthenia gravis. We calculated the specificity of the Cogan Lid Twitch to be 99%, with sensitivity 75% and false positive rate 1%.

Conclusion: The Cogan Lid Twitch test is a specific and sensitive test to use in a neuro-ophthalmology clinic to evaluate for Myasthenia Gravis.

Biography
Noelle S. Matta has been an orthoptist for 8 years and is chief orthoptist at Family Eye Group in Lancaster Pennsylvania where she has worked for 15 years. She is involved in research and has published over 38 peer reviewed papers, presented over 67 posters and has presented over 48 lectures in many countries including the United States, China, Turkey, Romania and Colombia. Noelle has been involved with the many related committees in organizations including the American Association for Pediatric Ophthalmology & Strabismus, The American Association of Certified Orthoptists, The International Pediatric Ophthalmology and Strabismus Council and The International Orthoptic Association.

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