

NEW TEST TO SCREEN FOR GLAUCOMA DAMAGE
Fast, Office Based VEP Method for Glaucoma Assessment

PINE BROOK, N.J. – A recent paper published in the *Journal of Glaucoma* shows a new visual evoked potential (VEP) technique to be a fast, objective method to screen for functional damage in glaucomatous eyes. The technique, called short duration transient VEP (SD-tVEP), significantly decreases test duration and provides less subjectivity in evaluating results compared to traditional VEP methods. The study was carried out at New York Eye and Ear Infirmary (New York, NY) and resulted in the paper “Short Duration Transient Visual Evoked Potentials in Glaucomatous Eyes.” The researchers investigated the correlation between structural and functional damage in glaucoma patients.

Despite the many different devices found in an optometrist or ophthalmologist’s office, glaucoma remains a difficult disease to diagnose early. Functional damage from glaucoma is often assessed by a subjective method known as a visual field test. Patients are asked to concentrate on the center of a screen while small lights flash randomly in different spots. When the patient sees the light, they press a button. Because this test requires active participation from the patient, results are not always as accurate as physicians would like.

According to Robert Ritch, MD, one of the study authors, “The SD-tVEP results correlated significantly with the severity of visual field damage, but the VEP results were obtained objectively, which helps give eye care specialists more confidence in the findings.” In addition, in eyes with advanced glaucoma, poor VEP results were associated with decreased macular thickness on OCT, indicating a structural correlation as well.

Eye care specialists may now take advantage of this new VEP technique by using the Diopsys[®] NOVA-DN VEP Vision Testing System in their practice. The Diopsys[®] NOVA-DN uses SD-tVEP to record the electrical responses of a patient’s entire vision system and provides easy-to-read reports that give the doctor a simple way to evaluate optic nerve function. The test takes between 4 and 6 minutes, and doctors are able to compare tests over time to track disease progression. Optometrists and ophthalmologists may use VEP in addition to traditional testing methods to enhance diagnosis and treatment.

Diopsys, Inc. (<http://www.diopsys.com>) is a medical instrumentation company dedicated to delivering high-quality, cost-effective preventative health care solutions. The company specializes in the development and marketing of patient-friendly, non-invasive vision testing equipment utilizing Visual Evoked Potential (VEP). Diopsys has developed and markets the patented *Enfant[®] Pediatric Vision Testing System*, a device used by pediatricians to test for visual deficits, including amblyopia, in children as young as six months of age. Diopsys also provides the *Diopsys[®] NOVA-DT*, *Diopsys[®] NOVA-TR* and *Diopsys[®] NOVA-DN Vision Testing Systems* utilized by ophthalmologists and optometrists to aid in the detection, diagnosis and treatment of vision disorders.

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