

VEP Testing in Clinical Practice

VEP Aids in Decision to Treat Early POAG

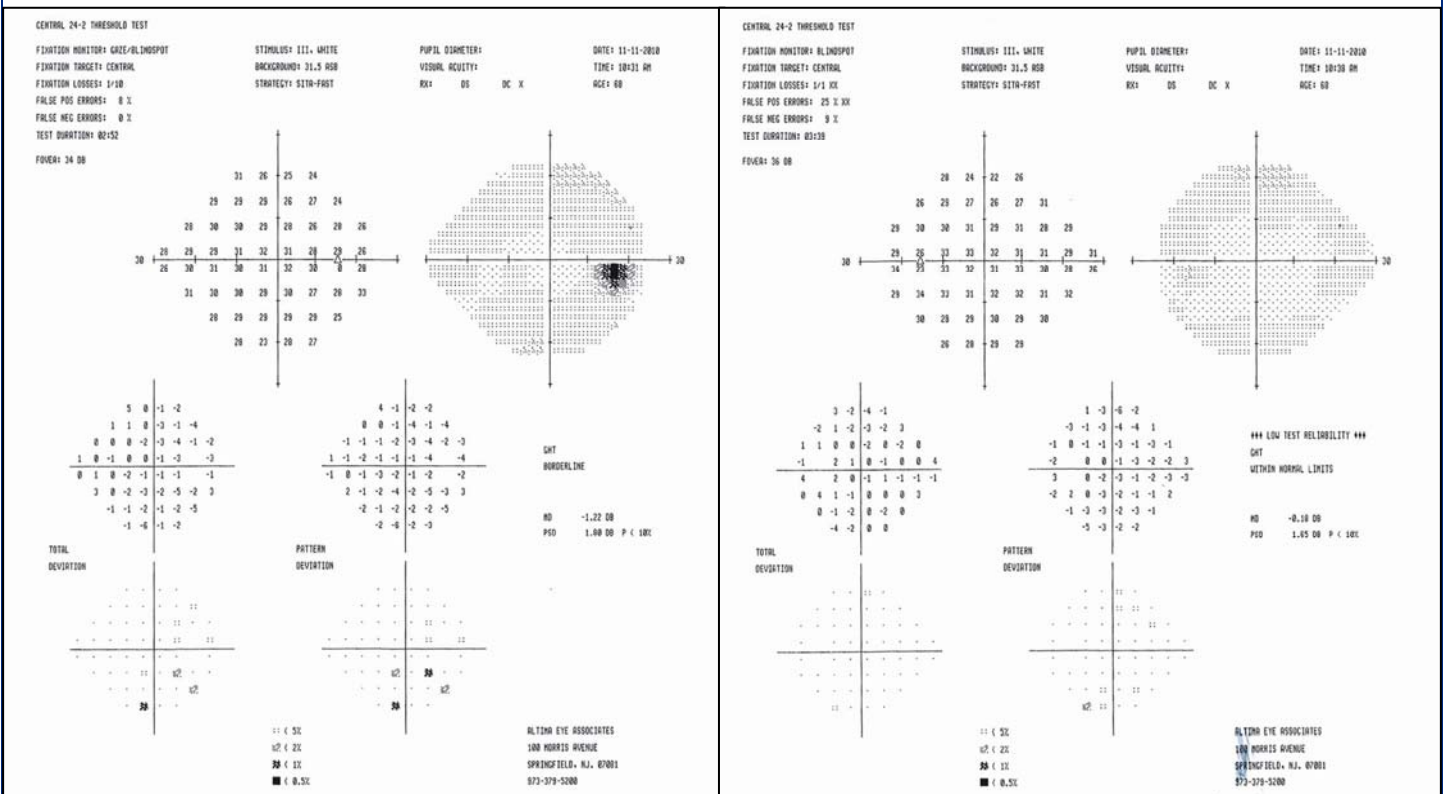
Dr. Frank Bucciero

Introduction: A 70 year old white female was referred into our office as a Glaucoma suspect for elevated IOP's. Her general health history was unremarkable other than being allergic to Sulfa. Her family eye history was positive in that her mother has Open Angle Glaucoma.

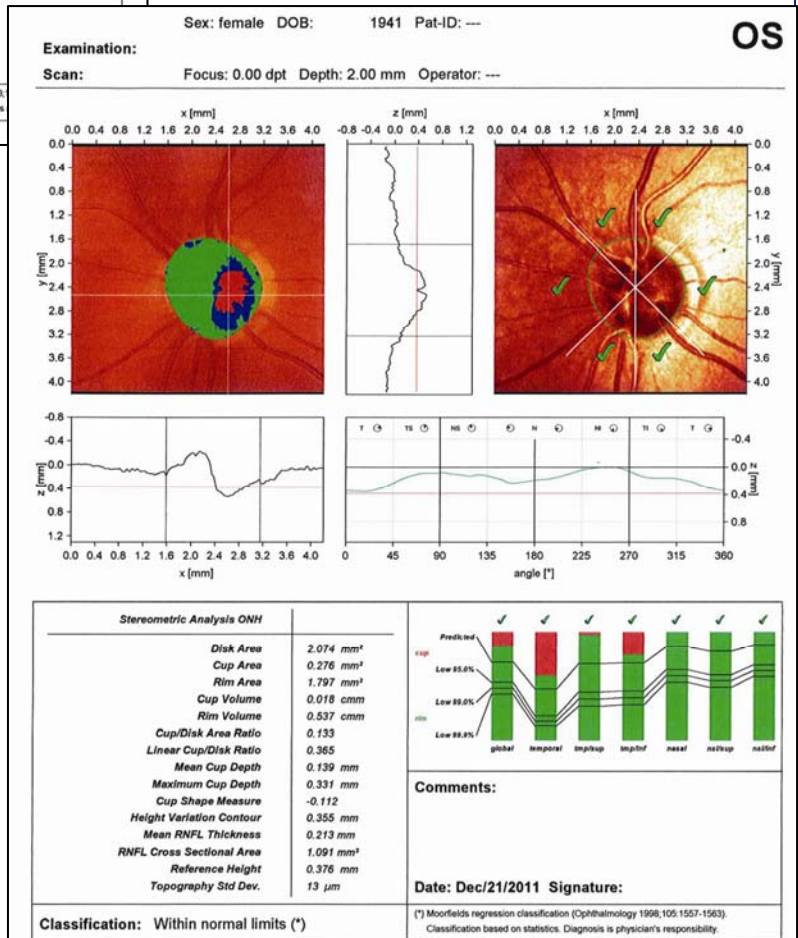
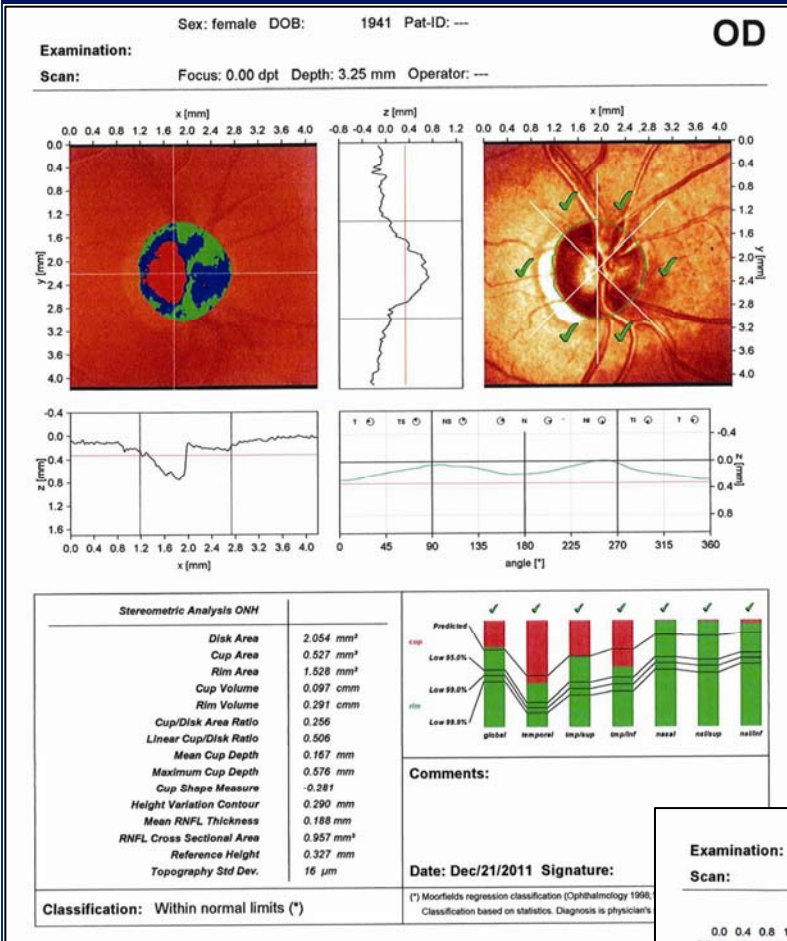
Findings: Best corrected visual acuities were 20/25 in the right and left eye respectively. Pupils were normal as were ocular motilities. Slit lamp exam was unremarkable and angles were open to grade IV OU. Intraocular pressures at 4:30 PM were OD 23mmHg and OS 21mmHg. Central corneal thicknesses were 506 and 507. Humphrey 24-2 Visual Field Testing showed a slight depression in the inferior Bjerrum area, and borderline GHT findings although this field was somewhat unreliable. The left eye visual field was without defect.

OD

OS



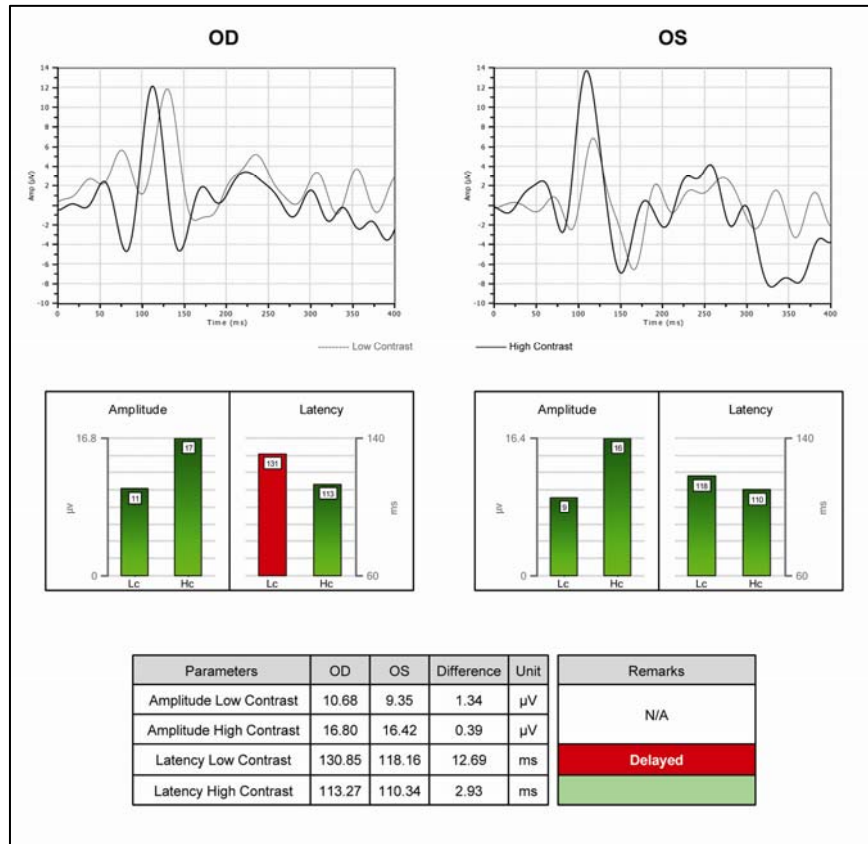
VEP Testing in Clinical Practice (cont.)



Optic nerve cupping was .50 in the right eye and .35 in the left eye. HRT scans of each eye were normal. The patient was asked to return for AM IOP's, repeat of VF and Diopsys[®] NOVA-LX study.

VEP Testing in Clinical Practice (cont.)

Intraocular pressures at 9:30 AM were 23 and 18 for each eye. Unfortunately, visual field testing was equally unreliable. The Diopsys® NOVA-LX Fixed Protocol with Multi-Contrast Stimuli studies revealed increased latency at the 15% contrast level in the right eye. At the 85% contrast level OD, the results were within normal limits. NOVA-LX results for both 15% and 85% were normal in the left eye.



Diagnosis and Treatment: This patient typifies the difficulty optometrists often face when making the decision to treat for Glaucoma. She had asymmetric elevated IOP's, asymmetric cupping, thin corneas, unreliable visual fields, normal HRT findings and a positive family history of Glaucoma. Having the ability to obtain a new objective measurement of optic nerve function by performing a VEP has helped significantly in the decision to treat this patient for early POAG. We initiated treatment with Lumigan 0.01 % 1 gtt QHS OU. At a follow up visit one month later her IOP's were 18 and 16. We felt this was at an acceptable level and will follow this patient at quarterly intervals.

For more information on the



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