

2013 - Raquel Beneish, "Residual tenacious functional amblyopia: underlying organic component?" Montreal, Quebec.

Purpose: To determine whether the failure to achieve optimal vision in 15-25% of amblyopic children treated with occlusion of the non-amblyopic eye, may be due to an underlying organic cause undetectable by standard ophthalmic evaluation. **Methods:** To test this hypothesis, we are investigating: **1.** the integrity of central visual function and primary visual pathways with the pattern VEP, flash and multifocal ERGs; **2.** the prevalence and characteristics (size and density) of a central scotoma in the amblyopic eye tested with a Goldman visual field (GVF); **3.** the usefulness of these tests in predicting, explaining and/or confirming the attainment of a plateau of recovery of vision.

Results: Preliminary results in 6 amblyopic children, whose optimal vision improved to $\leq 20/50$ with treatment, show a central scotoma of varying size and density. The scotoma persisted, but decreased in size and density with improving vision until a plateau of recovery was reached. **Conclusion:** Electrophysiological findings may help rule out or confirm whether the failure to achieve a cure in functional amblyopia might be attributed to the presence of an underlying organic component.

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