

Optometric Phototherapy-Based Multisensory Training Facilitates Reduction of Symptoms in Post-Concussion Syndrome

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ABSTRACT

Background: The objective of this article is to present the effectiveness of a multi-sensory training method that utilizes optometric phototherapy, oculomotor therapy, vestibular stimulation, and auditory stimulation, on reducing the symptoms of post-concussion syndrome. The setting is my neuro-optometric clinic.

Methods: The participants are 25 consecutive adult patients presenting to the clinic with post-concussion syndrome. The design is a comparison of symptoms and objective tests one week before and one week after treatment. The main measures are an acquired brain injury symptom survey, visual evoked potential, and Test of Information Processing Skills.

Results: 84% of patients reported improvement in a majority of their PCS symptoms; the patient group exhibited an average visual evoked potential (VEP) increase of 35% in low contrast amplitude; the patient group demonstrated an average increase in visual processing of 60%; auditory processing increased an average of 27%; delayed recall improved an average of 206%; all results were measured after an average treatment period of 38 days.

Conclusions: multi-sensory training utilizing optometric phototherapy, oculomotor therapy, vestibular stimulation, and auditory stimulation provides most post-concussion syndrome patients significant reduction in symptoms in a relatively short period of time. These patients were not making further appreciable progress in recovery prior to this treatment...they “hit a plateau”. In addition to subjective improvements, patients also demonstrated significant improvement in objective testing.

The entire article is available by calling Riverview Eye Associates at 614-451-7244.