

# TBI: Light More than Meets the Eye

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Light therapy or Syntonics is a type of ocular science involving selected light frequencies through the eyes. It has been used clinically for over 70 years in the field of optometry with success in the treatment of visual processing disorders, as well as, stress and trauma. However, there has been limited research on its affect in TBI patients. This is a continuation project to provide evidence that Syntonics improves peripheral vision and vision complaints in TBI patients. In order to carry out the experiment, participants underwent a functional visual field to show the extent of their peripheral vision. A baseline visually evoked potential was also performed to evaluate the significance of any problems in the visual pathway. A visual complaints questionnaire was filled out pre and post Syntonics. The initial visual field of all test subjects revealed constricted fields of 5-15 degrees. After every 8 sessions there was an increase in peripheral vision. Post Syntonics the peripheral vision in all participants was considered to be within a normal range of 25-30 degrees. Furthermore, each subject reported improvements in mobility, speech, coordination, and an improved quality of life. This research supports a non-neuronal explanation of how light applied through the eyes produce effects that reach into every part of the body. Future research to be considered involves finding out how light activates healing in diverse clinical conditions and in tissues throughout the body.

## **Awards Won:**

SPIE, the international society for optics and photonics: Third Award of \$250