Servicemen and woman who have experienced concussions and traumatic brain injury from blast exposure may be helped by Irlen Spectral Filters if they experience any of the following:

- EXTREME PHOTO SENSITIVITY (i.e., sensitivity to bright lights, sunlight, or fluorescent lights)
- CHRONIC HEADACHES OR MIGRAINES that are not relieved by other courses of treatment and do not respond to medication
- HAVE HAD CHANGES IN PERFORMANCE and their ability to function in daily life and on the job
- DIFFICULTY WITH READING, computers, tablets, and/or smartphone use
- CHANGES IN DEPTH PERCEPTION

Since 2011, Irlen has partnered with Semper Fi Fund to provide Irlen Spectral Filters to servicemen and women experiencing “medically resistant” headaches and migraines as a result of combat-related concussion or brain trauma. A study of 178 of these servicemen and woman showed immediate and dramatic improvements of headaches and migraines, as well as a variety of other areas, including reading, night driving, eye-strain, and dizziness. Results from this study were presented at the World Congress on Brain Injury held in San Francisco, CA in March 2014.

The changes are miraculous. He has made more improvements in the past month with his Irlen Filters than he has made in the past 4 years.”

– Wife of SSgt. George Hill

In general life has gotten easier, better, and less painful.”

– Bradley Pierson

The Irlen Institute has helped over a million people worldwide through its comprehensive diagnostic process and innovative color filtering technology. Backed by over 35 years of scientific research, the Irlen Method’s proprietary technology filters out specific wavelengths of light to alleviate stress on the brain and allow it to process visual information correctly.
Visually intensive activities cause over-activity in the brains of individuals with Irlen Syndrome. When these individuals wear their Irlen Spectral Filters, the brain calms down and brain function normalizes.

*Light and the Brain, Daniel Amen, MD*

In one study by Amen and colleagues, comparing the brains of 42 people with Irlen syndrome to 200 age-matched individuals without any evidence of Irlen syndrome, SPECT scans showed increased activity in the brain’s emotional and visual processing centers and decreased activity in the cerebellum (an area that helps to integrate coordination and new information).

*fMRI Evidence that Precision Ophthalmic Tints Reduce Cortical Hyperactivation in Migraine*

Huang, J., Zong, X., Wilkins, A., Jenkins, B., Bozoki, A., Cao, Y. (2011). Cephalalgia, 31(8):925-36. Huang et al. (2011) used fMRI to investigate differences between individuals suffering visual stress and controls in relation to migraine and to determine the effectiveness of precision-tinted colored filters for individuals suffering from visual stress. The research showed a normalization of cortical activation and spatial frequency tuning in the migraineurs by precision tinted filters that suggests a neurological basis for the therapeutic effect of these lenses in reducing visual cortical hyperactivation in migraine.
**Precision-tinted spectral filters: A successful intervention for medically-resistant headaches and migraines after brain injury**

**Methods**

**178 U.S. military personnel**

Data regarding headache and migraine frequency and medication use were analyzed using paired-samples t-tests. All comparisons were highly significant (p<.00). Likert scale data related to physical symptoms and activities causing difficulties were analyzed using multiple analysis of variance (MANOVA) with Bonferroni correction. The multivariate and all univariate analyses were highly significant (p<.00).

**Areas of Inquiry**

Frequency/severity of headaches/migraines, light sensitivity, academic difficulties, physical symptoms, emotional symptoms, depth perception, driving.

**Conclusion**

For military personnel experiencing debilitating headaches and migraines that fail to respond to other interventions, Irlen Spectral Filters provide immediate relief with a reduction of symptoms when the correct color is worn as glasses. In March 2011, Irlen partnered with Semper Fi Fund to provide Irlen Spectral Filters to military personnel experiencing “medically resistant” headaches and migraines as a result of combat-related brain or head trauma.

**References**


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