### Precision-tinted spectral filters

**A successful intervention for medically-resistant headaches and migraines after brain injury**

**Methods**

**178 U.S. military personnel**

Have already tried one or more treatments: Migraine medication, other medication, acupuncture, chiropractic treatments, healing touch, yoga, meditation, vestibular therapy, botox, hyperbaric, alpha stem

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

### Results

**Pre**

Avg. number of migraines per month 22

Percent of the day headaches are experienced (avg) 96%

**Post**

Avg. number of migraines per month 1

Percent of the day headaches are experienced (avg) 5%

**SEVERITY OF DIFFICULTY BEFORE AND AFTER**

Average rating of difficulty (0-5 scale, 0 means “no problem” and 5 means “severe problem”)

<table>
<thead>
<tr>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Sensitivity</td>
<td>4.75</td>
</tr>
<tr>
<td>Driving/ Night Driving</td>
<td>3.81</td>
</tr>
<tr>
<td>Eyestrain</td>
<td>4.01</td>
</tr>
<tr>
<td>Depth Perception</td>
<td>2.71</td>
</tr>
<tr>
<td>Reading</td>
<td>4.8</td>
</tr>
<tr>
<td>Nausea</td>
<td>2.41</td>
</tr>
<tr>
<td>Headaches</td>
<td>4.54</td>
</tr>
<tr>
<td>Migraines</td>
<td>4.51</td>
</tr>
<tr>
<td>Dizziness</td>
<td>3.21</td>
</tr>
<tr>
<td>Anxious</td>
<td>4.13</td>
</tr>
<tr>
<td>Fatigue</td>
<td>4.42</td>
</tr>
</tbody>
</table>

**Pct. decrease**

98% 98% 96% 96% 94% 93% 91% 90% 55% 54%

### References


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