

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: GREEN LIGHT FOR PAIN RELIEF: MIGRAINES
REPORT: MB #4288

BACKGROUND: A migraine can cause severe throbbing pain or pulsing sensation, usually on one side of the head. I can even get to the point where symptoms may result in nausea, vomiting, and extreme sensitivity to light and sound. Migraine attacks can cause severe pain for hours, even days! There are warning symptoms called aura that can happen before a headache. These include flashes of light, blind spots, or tingling on one side of the face or in the arm or leg. Overall, there are four stages to a migraine: prodrome, aura, headache and post-drome. Prodrome occurs two days before the headache and has symptoms of constipation, neck stiffness, increased thirst and urination, and frequent yawning. The post-drome however may leave you feeling dizziness, weakness, and confusion. If one is regularly experiencing migraines, they should consult a doctor.

(Source: <http://www.mayoclinic.org/diseases-conditions/migraine-headache/symptoms-causes/dxc-20202434>)

TREATMENT: Pain-relieving medications can be used to treat migraines. These are also known as abortive and acute treatment. Preventative medications are another option and are taken regularly to reduce severity or frequency of migraines. Alternative treatments are acupuncture, massage therapy, vitamins such as vitamin B-2, cognitive behavioral therapy, and a relaxation technique called biofeedback. Furthermore, lifestyle changes can be a big help for some. It is suggested to take needed rest, and enough sleep.

(Source: <http://www.mayoclinic.org/diseases-conditions/migraine-headache/diagnosis-treatment/dxc-20202471>)

NEW TREATMENT: Green light has been found to ease the pain of migraines. White, blue, and red light increase migraine pain, however, low-intensity green light seems to reduce it. The thalamus in the brain has neurons that transmit sensory information from our retinas. These cross over with other neurons that signal pain. As a result, during migraine, light can worsen pain and pain can cause visual disturbance. The brain and eye recordings taken from volunteers showed that green light created a lesser amount of electrical activity, both in the eye and the brain, than any other color of light. Researchers are hoping that there will be sunglasses that filter out different wavelengths of light, except green to help aide those with migraines. The team also experimented with other colors, and found that for whatever reason, green worked the best.

(Sources: <https://www.newscientist.com/article/2089062-green-light-found-to-ease-the-pain-of-migraine/>

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com