Green eyeglasses reduce pain-related anxiety in fibromyalgia patients, study shows
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Wearing special green eyeglasses for several hours a day reduces pain-related anxiety and may help decrease the need for opioids to manage severe pain in fibromyalgia patients and possibly others who experience chronic pain, according to a study being presented at the Anesthesiology 2022 annual meeting.

"Our research found that certain wavelengths of green light stimulate the pathways in the brain that help manage pain," said Padma Gulur, M.D., lead author of the study and executive vice chair of Duke Anesthesiology and Duke Health, Chapel Hill, North Carolina. "There is an urgent need for additional treatments to reduce the use of opioids among patients with fibromyalgia and other types of chronic pain, and green eyeglasses could provide an easy-to-use, non-drug option."

Few alternatives to opioids—especially non-drug options—exist for patients with severe and chronic pain conditions such as fibromyalgia, which causes pain all over the body. Fibromyalgia affects about 4 million U.S. adults, according to the Centers for Disease Control and Prevention.

Pain and anxiety share similar biological mechanisms. Additionally, fear of pain exacerbates anxiety, often leading to increased opioid use, said Dr. Gulur.

The researchers studied 34 fibromyalgia patients who were randomized to wear various shades of eyeglasses four hours a day for two weeks: 10 patients wore blue eyeglasses, 12 wore clear eyeglasses and 12 wore green eyeglasses. Patients who wore green eyeglasses were four times more likely to have reduced anxiety than those in the other groups, which saw no reduction in anxiety.

"We found that although their pain scores remained the same, those who wore the green eyeglasses used fewer opioids, demonstrating that their pain was adequately controlled," said Dr. Gulur. "We would recommend the green eyeglasses treatment for those with fibromyalgia and are studying patients with other chronic pain conditions to determine if it would be beneficial."

The eyeglasses are specially formulated to filter a specific wavelength on the green light spectrum, said Dr. Gulur. She noted that most patients who wore the green eyeglasses reported feeling better and asked to keep wearing them.

Provided by American Society of Anesthesiologists