Can light therapy treat non-seasonal depression too?

By Carina Storrs

The days are short and the nights are long, and you can't help think that winter would be so much more pleasant if it were just a bit more like summer.

That is the rationale for light therapy, in which people sit in front of a special light box in their home for about 30 minutes in the morning every day. And experts agree that the therapy can be an effective treatment for seasonal affective disorder, or SAD, a form of depression that affects about 5% of people in the United States during fall and winter months.

But could light therapy also help other disorders? One explanation of how it works is by resetting circadian rhythms, our body's internal clock that controls sleep, metabolism, mood and stress. Disturbances in circadian rhythms have been associated not just with SAD, but also depression, bipolar disorder and dementia.

A recent study suggests that the beneficial effects of light therapy may indeed extend to depression. Researchers looked at a small group of 122 adults with depression, which is more prevalent than SAD, affecting about 7% of U.S. adults annually, and which can last throughout the year.

They found that, among the 32 patients who did light therapy alone and the 29 who had a combination of light therapy and Prozac, 44% and 59% experienced remission after eight weeks, meaning that their depression symptoms all but went away.

In comparison, only 19% of the 31 patients who just took Prozac and 30% of the 30 patients who did not receive any therapy achieved remission.

"I think this opens up another treatment option for people with non-seasonal depression and we need more treatment options because not everybody gets better with the standard treatment options," said Dr. Raymond W. Lam, professor of psychiatry at the University of British Columbia. Lam is the lead author of the study, which was published in November in the journal JAMA Psychiatry.

Study participants who used light therapy sat in front of a light box for 30 minutes every day right after waking up, preferably between 7 and 8 a.m. They did not have to actually look at the box and could instead read, watch TV or do other activities. The boxes emitted 10,000 lux, which is the amount of light someone would be exposed to if they went outside at about 7 a.m. during the summer, Lam said.

The study is the first one to look at the effect of light therapy on its own among people with depression. However the findings are similar enough to previous studies, at least for light therapy as an add-on treatment, that "clinicians should be
confident in thinking this is an option," Lam said.

The study establishes that light therapy could be used on its own, said Dr. Richard S. Schwartz, a part-time associate professor of psychiatry at Harvard Medical School. Even though it is a small study, "light therapy is a fairly benign treatment that I think this is certainly sufficient evidence for patients and doctors to decide together that that is what they want to try first," he said.

Alternatively, light therapy could be started in combination with psychotherapy or, as in the current study, antidepressant medication, Lam said.

The researchers did not observe serious side effects associated with light therapy. There were higher rates of heartburn, headache and dizziness among participants who either used light therapy or took Prozac compared with those who did not have any treatment. But these side effects were less common in the group that used light therapy and also took Prozac, suggesting that the adverse reactions of the treatments might somehow cancel each other out, Lam said.

Although many questions remain about how light therapy could affect depression, it probably has something to do with shifting circadian rhythms so that your body thinks it is earlier in the day, Schwartz said.

Light therapy could also be beneficial because it increases the levels of neurotransmitters, such as serotonin, similar to how antidepressant medications work, Lam said.

In addition to depression, there is emerging evidence that light therapy may help people with bipolar disorder, dementia and chronic pain, Schwartz said. A 2014 study found that light therapy in combination with sleep deprivation helped reduce depressive symptoms in people with bipolar disorder. Other studies have suggested that light therapy may improve sleep among people with dementia and their caregivers, and may ease lower back pain.