

Seasonal depression: Light therapy lifts symptoms

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By Pohla Smith, Pittsburgh Post-Gazette



Stacy Innerst/Post-Gazette

Larry Pederson grew up in the small Canadian city of Medicine Hat and "really suffered" mood-wise in the winters. But things grew even worse when he moved 400 miles north to study pre-medicine at the University of Alberta in Edmonton.

"I couldn't function," said Mr. Pederson, 52, who now again lives in Medicine Hat, Alberta. "I had five 8 o'clock classes, and I was going to class in the dark and coming home in the dark and sitting in classes all day and I couldn't function. I couldn't absorb information."

It was a 180-degree turnaround for Mr. Pederson, who had been a standout high school student. "Then I get to university and I couldn't function, so after that first year I switched majors. I switched to philosophy because classes started at 10. ... I had to give up my dream of being a doctor."

He didn't know it, because the mental disorder hadn't yet been identified, but he was suffering from what is now known as seasonal affective disorder, or SAD. According to local psychiatrists, SAD, believed to be triggered by a lack of exposure to light, was designated as a mental disorder in the early 1980s. It has its own set of symptoms and treatments, with the latter including an interesting and effective remedy that involves sitting daily in front of a special lamp box.

After Mr. Pederson found relief with the special lamp he went on to develop his own portable model.

"SAD is a particular pattern of depression," said Dr. Daniel Buysse, associate professor of psychiatry at the University of Pittsburgh School of Medicine and the medical director of the sleep evaluation center at the Western Psychiatric Institute and Clinic at the University of Pittsburgh. "It has more or less the symptoms typical of depression, but it happens at the onset of a predictable time of year. Most commonly it will have an onset at an interval between summer and fall as the days start to get shorter.

"The symptoms are very similar to those of any type of major depressive episodes: sadness, loss of interest, inability to experience pleasure," Dr. Buysse added.

There also may be "decreased energy, increased need for sleep, sleeping longer hours, tremendous fatigue and increased appetite, irresistible cravings for carbohydrates and sweets," said Dr. Dorothy Sit, assistant professor of psychiatry and researcher at Western Pennsylvania Institute and Clinic.

"The thing that sets SAD apart from other episodes of depression is that SAD more commonly has symptoms of oversleeping vs. insomnia, and the weight change more commonly tends to be weight gain, where weight loss is more typical of depression," Dr. Buysse said.

SAD is not to be confused with the "winter blues," also known as the "winter doldrums," which produces SAD-like symptoms. Sufferers of the doldrums are bothered by the symptoms but remain fully functional, according to the Web site of the Center for Environmental Therapeutics. CET is a non-profit organization dedicated to education and research on

treatments for SAD, nonseasonal depression and circadian rhythm sleep disorders. It estimates that "about 25 percent of the population at the middle-to-northern latitudes of the United States gets the winter doldrums."

For the most part, Mr. Pederson regained his ability to function when he moved in 1980 to Los Angeles, where the sunshine is plentiful. He attended film school at the University of Southern California and then became a script writer. He stayed 14 years and "felt fantastic" -- except when he traveled back to Canada each year to spend the Christmas holidays with his parents.

"After a day or two I felt like I had the flu," he said of his visits home. "I was miserable, cranky, I had no energy. I was sleepy all the time. When I went back to California in January I felt fine."

There were longer periods of suffering ahead.

In 1989, he worked on a film in Vancouver. The project took a year. "In summer, I was fine; come winter, November, I could not function again." He heard about a psychiatric researcher using lights to work with patients and tried to get in to see him, but there was a waiting list. The researcher was the now well-known SAD expert Dr. Raymond Lam. "So the film company had to fly me back to California every two weeks to recharge my batteries," Mr. Pederson said.

A worse period came when Mr. Pederson's father was diagnosed with terminal cancer in 1994. He moved home that summer to help his parents.

"He passed in late October, the first week of November. I was suicidal," Mr. Pederson said. "It didn't feel like it was grief. I had so much pain. It was existential, physical, psychological and emotional pain.

"I felt like I was living in molasses. Everything was an effort. ... In Los Angeles I played squash five days a week. I was in the best shape of my life. Incredibly, in Canada, I couldn't get off my parents' couch."

Mr. Pederson's mother sent him to a friend who was a psychiatrist. The doctor asked Mr. Pederson to fill out a 28-item questionnaire. "She told me I was not losing my mind. She said, 'You have SAD. You got all 28 questions right. You are like a poster boy for SAD.'

"I said 'What is it? No. 1, and, No. 2, what do I do?' She said, 'It's a form of depression caused by a lack of light.' "

The psychiatrist asked Mr. Pederson if he would take an antidepressant. He said no. Then the doctor asked if he would try light therapy.

"I said 'That's like snake oil isn't it?' "

Eventually Mr. Pederson agreed to try one of six big light boxes the psychiatrist had persuaded the Medicine Hat hospital to buy for her patients to take home and try.

"I thought, 'I don't think it'll work,' but I was so desperate I'd try anything. I took the box home and sat in front of it for a half-hour and literally could feel something receding from my body. It was the melatonin leaving my body. I could feel my energy coming back, my mood coming back. In 30 minutes I felt like I was back in Southern California. I was amazed."

But he was not persuaded. Rather, he thought it was a "placebo effect," and so Mr. Pederson skipped using the light the next morning.

"I felt like hell again," he said. "I said, 'OK, I'm going to buy one of these lights.' "

Eventually, Mr. Pederson decided he wanted to manufacture a smaller, more attractive and portable light. His firm has been manufacturing "cool"-looking lights since 1999. He uses his every day year-round.

Mr. Pederson's light is a white LED; others have fluorescent bulbs.

"The most commonly used light provides full-spectrum light. It mimics the summer sun," Dr. Buysse said. "More recently, people have been investigating blue light."

The light box is a primary therapy for SAD, but science still has things to learn about it.

"In some studies, light relieves symptoms in 75 percent of SAD patients within two to 14 days," the University of Pittsburgh Medical Center Web site says. "Scientists believe that light entering through the eye may modify brain chemistry, correcting the abnormalities resulting from a lack of light. While light therapy almost certainly works, only a relatively small number of studies have been rigorous enough to offer scientific proof of light therapy's effectiveness."

Other treatments for SAD include antidepressants and psychotherapy.

Light therapy has some potential side effects and isn't advisable under certain conditions. The primary one is that a person with bipolar disorder can be at risk for episodes of mania. Dr. Sit said a Pitt research study is now studying the effects of bright light therapy on people with bipolar depression.

Dr. Buysse said the most common side effects of therapy fall under the nuisance category.

"Headaches are a very common one. Theoretically, they could cause temporary or permanent eye damage, but the chance is very small. The other risks are really very minute, as commonly available lights have filters that block ultraviolet rays so there are no skin burns or eye damage."

Light boxes are available in retail drug and health food stores and on the Internet. The search "SAD light box sales" brought up numerous sales sites. Dr. Sit cautioned, however, that there is "no strict quality control" and suggested going to the on-line store at <http://cet.org/>, which recommends two different types of therapeutic products, one for dawn simulation therapy and the other bright light therapy.

Dr. Sit said that the cost of the box, with a letter from a physician, should be covered, "because it's the first line of treatment for SAD."

Regardless of where they buy them, "People are well-advised to work with a doctor" in getting started using their boxes, Dr. Buysse said.

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