

Drew University
The McClintock Center
for
Counseling and Psychological Services

Seasonal Affective Disorder (SAD) and Light Therapy

What is Seasonal Affective Disorder?

Seasonal Affective Disorder (SAD) is a form of depression with symptoms that occur during the winter months and usually subside during the spring and summer months. The main age of onset of SAD is between 18 and 30 years of age.

What causes SAD is a topic of ongoing research. What is known is that it has something to do with the amount of sunlight you receive. As seasons change, there is a shift in our “biological internal clocks” or circadian rhythm, due partly to these changes in sunlight patterns. This can cause our biological clocks to be out of “step” with our daily schedules. In addition, Melatonin, a sleep-related hormone secreted by the pineal gland in the brain, has been linked to SAD. This hormone, which may cause symptoms of depression, is produced at increased levels in the dark. Therefore, when the days are shorter and darker the production of this hormone increases.

What are some of the symptoms associated with this disorder?

Symptoms may include some combination of the following:

- Depression: *misery, guilt, loss of self-esteem, hopelessness, despair, and apathy*
- Anxiety: *tension and inability to tolerate stress*
- Mood changes: *extremes of mood and, in some, periods of mania in spring and summer*
- Sleep problems: *desire to oversleep and difficulty staying awake or, sometimes, disturbed sleep and early morning waking*
- Lethargy: *feeling of fatigue and inability to carry out normal routine*
- Overeating: *craving for starchy and sweet foods resulting in weight gain*
- Social problems: *irritability and desire to avoid social contact*
- Sexual problems: *loss of libido and decreased interest in physical contact*

What treatment is available for SAD?

Treatments may include:

- Light therapy – Consists of sitting in front of a specially-designed light box that provides a full spectrum of artificial light into your eyes.
- Medication – A doctor can prescribe an antidepressant in combination with light therapy, or as an alternative to light therapy.
- Psychotherapy – Therapy may help identify and modify negative thoughts and behaviors, or sources of stress that may play a role in bringing about signs and symptoms of SAD.

Use of Light Therapy

When used correctly, light therapy can help to alleviate fatigue and lethargy, and provide some relief for depression, during the shorter days of fall, winter, and into spring. Relief from depression may be gotten by spending 15 to 30 minutes outside in the sun every day because the effect of sun light registering on the brain through the eyes boosts mood. But if winter outdoor time isn't practical, artificial light therapy might help depression.

How light therapy can help:

Fall and winter seasons are characterized by a reduced amount of daylight. Research indicates that light affects the receptors in our brain that produce serotonin, which in turn affects people's mood. Light therapy has been shown to be effective in up to 85 percent of diagnosed cases. A research review commissioned by the American Psychiatric Association in Washington, D.C., concluded that as little as 30 minutes of light therapy 3 or 4 times per week is an effective treatment of seasonal affective disorder (SAD) and other forms of depression. This review appears in the April 2005 American Journal of Psychiatry.

Studies of light therapy for depression have not been limited to SAD (Seasonal Affective Disorder). There is promising evidence that it may be effective in non-seasonal depression as well. Light therapy also works well for bulimia, PMS, Insomnia, and chronic fatigue.

Side effects

Side effects, although minimal, have been reported by a very few people. These side effects are not dangerous and are usually temporary. They can be remedied by reducing exposure time.

People occasionally report eye irritation and redness that can be alleviated by sitting farther from the lights or for shorter periods. Some people report slight nausea at the beginning of treatment. These usually subside a few hours after treatment is finished and, generally, disappear after several exposures.

The most dramatic side effect, and one that occurs infrequently, is a switch from the lethargic state to an over-active state in which one may have difficulty getting a normal amount of sleep, become restless and irritable (even reckless) and be unable to slow down, or subjectively speedy and "too high". This state is called hypomania, when milder, and mania when more severe. People who have previously experienced these states in late spring or summer are particularly vulnerable. If this occurs, the use of lights should be reduced or terminated.

It is possible that you may become depressed during a cold or viral infection. Light therapy could at this time cause irritation. However, soon after the infection or virus has cleared up, the positive effects of the light will return.

Light Therapy is not recommended

If you have an **eye or skin condition which is affected by bright light you should consult a doctor before embarking on light therapy.** **Do not undergo the bright light treatment if you are suffering from disorders such as:**

- Glaucoma
- Cataracts
- Retinal detachment
- Retinopathy

- Macular degeneration
- Retinitis pigmentosa

The bright light could worsen the eye problem or cause a rash in a skin condition.

Seek medical advice before starting light therapy if you suffer from:

- hypertension
- diabetes
- Lupus Erythematoses
- any history of eye disease in the family

Lights combined with antidepressant medication and other medications:

Those who have received partial benefit from antidepressants often begin light therapy without changing drug dose. Some people find a combination of light and drug treatment to be most effective.

However, some antidepressant drugs, the **tricyclics (imipramine, nortriptyline, desipramine, amitriptyline)**, as well as **lithium, St. John's Wort, and melatonin**, are known or suspected to be "photosensitizers", i.e., they may interact with the effect of light in the retina of the eyes. **Users of antidepressant or other drugs should therefore check with their physician or ophthalmologist (eye specialist) before commencing light treatment.**

Medications that can cause photosensitization are:

- tetracycline
- tricyclics
- antiarrhythmic medications
- antimalarial drugs
- antirheumatic drugs
- psoralen medications
- diuretics
- melatonin (not to be used concurrently with Light Therapy)
- sulfonamides (antibacterial medication)
- St. John's Wort
- Neuroleptics

Other ways that will help reduce SAD symptoms:

- Educate yourself and gain social support
- Increase amount of daily light exposure
- Allow natural light to permeate your home and working environment
- Spend time near windows if possible
- When you are outside refrain from using sunglasses if medically appropriate
- Exercise regularly
- Maintain a regular sleeping schedule

- Record a log of your energy, mood, activities, sleep, appetite, and weight
- Avoid if possible major life changes or stress during fall and winter months
- Schedule sunny vacations during winter months

Steps to take for Light Therapy services at C&PSs:

- Schedule a consultation appointment with a C&PSs staff member at (973) 408-3398 to assess appropriate services and answer your questions
- Your doctor's permission may be required if you have bipolar disorder, are taking light sensitive medications, or have medical conditions such as retinal diseases, diabetes, or lupus.

Light therapy services will require:

- A brief demonstration on how to use the equipment
- Scheduled appointments during office hours
(9 a.m. to 5 p.m., Monday through Friday)

Please sign our release form before using the light. *Thank you.*