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ABOUT SEASONAL DEPRESSION-What you should know...

What is it? Seasonal depression, also know as seasonal affective disorder (SAD) is a disorder characterized by recurrent major depressive episodes that usually coincide with the seasonal decrease of daylight during the autumn and winter months. Although patients with SAD may have depressive episodes during other times of the year, the diagnosis of SAD requires that the number of seasonal episodes substantially outnumber the nonseasonal episodes during the individual's lifetime.

How long does it last? The depressive episodes can last up to six months. Who is affected? SAD is a relatively common disorder with the prevalence ranging from an estimated 1.5% in south Florida to about 9% in the northern United States. Thus, the prevalence of the disorder greatly increases in the colder states.

Symptoms: Depressed mood, loss of interest, weight gain, appetite changes, hypersomnia, agitation or psychomotor retardation, fatigue, feelings of worthlessness or guilt, impaired concentration, and suicidal thoughts or behavior

Diagnosis: A major depressive episode is defined by the presence of five or more of the nine core symptoms of major depression for at least two weeks. Identical features define a "seasonal" major depressive episode.

Prevention: If you think you have symptoms of SAD, see your doctor for a thorough examination. If you have been diagnosed with SAD, here are some things that may prevent future recurrences: try to spend time outside, begin using a light box (see description below) during the fall season, eat a well-balanced diet, exercise, and continue with regular activities. **Treatment:** The only FDA approved medication for SAD is Wellbutrin XL®. However, research has shown that light therapy or phototherapy is an effective treatment for SAD. These can be used as monotherapy or in combination. More studies are needed to prove that other therapies, such as SSRIs, are beneficial for the treatment of SAD.

- 1. Food and Drug Administration. FDA Consumer. 2006;40(5):7
- 2. Modell J, Rosenthal N, Harriett A, Krishen A, Asgharian A, Foster A et al. Seasonal affective disorder and its prevention by anticipatory treatment with bupropion XL. *Biol Psychiatry*. 2005;58:658-667.
- 3. The Cleveland Clinic [homepage on the Internet]. What is seasonal depression?; [cited 2006 Nov 16]. Available from: http://www.clevelandclinic.org/health/health-info/docs/2300/2361.asp?index=9293.

FROM THE HEADLINES...

New Indication...On June 12th, 2006, the Food and Drug Administration (FDA) approved Wellbutrin XL® (bupropion HCL extended release tablets) for the treatment of SAD. Wellbutrin XL is also approved for treatment of major depressive disorder. Keep in mind, Wellbutrin XL® contains a "black box" warning. This includes an increased risk of suicidal thoughts and behavior in pediatric patients treated with antidepressant medications. To date, bupropion is the only FDA-approved treatment for SAD.

http://www.fda.gov/bbs/topics/NEWS/2006/NEW01388.html

FROM THE MEDICAL LITERATURE...

Clinical Trials...The effectiveness of Wellbutrin XL for the prevention of SAD episodes was established in 3 double-blind, placebo-controlled trials in 1042 adults with a history of major depressive disorder in autumn and winter. Patients received either bupropion XL 150-300mg or placebo daily by mouth from enrollment until spring and then were followed while off of medications for 8 additional weeks. In study A, 19% of patients experienced a recurrence of seasonal major depression on bupropion XL versus 30% on placebo. In study B, 13% of patients experienced a depressive recurrence on bupropion XL versus 21% in placebo. Lastly, in study C, 16% of patients had a recurrence of major depression on bupropion XL versus 31% on placebo. The investigator's concluded that it is possible to prevent the recurrence of seasonal major depressive episodes by beginning bupropion treatment early in the season while patients are still well. The results of all 3 clinical trials achieved statistical significance.

Modell J, Rosenthal N, Harriett A, Krishen A, Asgharian A, Foster A et al. Seasonal affective disorder and its prevention by anticipatory treatment with bupropion XL. *Biol Psychiatry*. 2005;58:658-667.

Other Treatments... Many studies with SSRI's in the treatment of SAD have been completed. Most of the studies have compared pharmacotherapy to placebo rather than light therapy, making it difficult to determine which therapy is superior. In the largest of these trials, patients with SAD had significantly better response on several measures of depression after eight weeks of sertraline (Zoloft) therapy compared with control patients. One trial looked at fluoxetine compared to light therapy. Conversely in another trial of 168 patients who had a positive response to light therapy, citalopram (Celexa) was found to be no more effective than placebo at preventing relapse; however, it was superior in terms of some secondary measures of depression. In general, current evidence does not provide clear guidance as to whether antidepressant treatment is superior to light therapy, or whether antidepressants are useful as an adjunct to light therapy.

Lurie SJ, Gawinski B, Pierce D, Rousseau SJ. Seasonal affective disorder. Am Fam Physician. 2006;74:1521-1524.

See the Light!!!...Light therapy is a very effective treatment for SAD with clearly defined parameters. The basic parameters of treatment include intensity, wavelength, duration of daily exposure, and timing of light exposure. Benefits of treatment are usually seen within two to seven days, and the response rate ranges from 60% to 90%. The exact mechanism of action of light therapy is unknown, but it is thought to be due

therapy. In addition, situations where pharmacological intervention is risky should warrant the

to changes in neurohormone levels. Blood levels of melatonin are rapidly reduced by light exposure. Serotonin and dopamine may also play a role in light therapy, but further research is needed.² Timing and duration of treatment also require further evidence. The side effects of light therapy are minimal. They include headache, nausea, and vision irritation. These usually improve with continued

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consideration of bright light therapy. If patients are unable to tolerate the treatment due to agitation, headache or nausea, increasing the distance from the light box or changing the duration of therapy can reduce the intensity of the treatment. There is emerging evidence on the role of combining light therapy with pharmacological treatment.¹

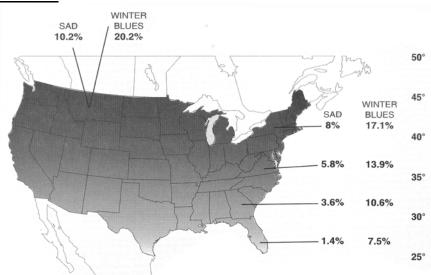
- 1. Blumberger D, Levitt A. The light-er side of treating seasonal affective disorder. *Psychiatric Times*. 2005 October; 22(11):49-50.
- 2. sltbr.org [homepage on the Internet]. Society for Light Treatment and Biological Rhythms; c1994 [updated 2000 May; cited 2006 Nov 20]. Available from: http://www.websciences.org/sltbr/sadfaq.htm.

Link between SAD and Pregnancy?

Is it a disorder or just nature?!?!? An interesting aspect of the disorder is the large gender and age difference in rates of occurrence. SAD occurs most commonly among women in their childbearing years. The hallmark symptoms of SAD of increased sleep, weight gain, and carbohydrate craving are very similar to another condition affecting women in their childbearing years...pregnancy! During the season known historically for gestation, could SAD be the female body's natural preparation for childbirth? Evolutionary biologists generally claim that seasonal food shortages in the past favored reproduction at certain times of the year. Women's reproductive health is tied to their energy balance. The best time for gestation would be the winter after harvest has been stored and work is at a minimum. The same time symptoms of SAD manifest.

Davis C, Levitan R. Seasonality and seasonal affective disorder (SAD): An evolutionary viewpoint tied to energy conservation and reproductive cycles. *J Affect Disord*. 2005; 87:3-10

A Regional Disorder?



www.isu.edu/.../IdealClass files/image004.jpg

- Latitude is a risk factor for SAD.
- This is possibly due to the decreased amount of daylight in higher latitudes compared to latitudes closer to the equator where the amount of daylight is high.

Summary of Seasonal versus Nonseasonal Depression...

Symptom	Seasonal	Non-seasonal
Sleep	Sleep more/difficulty staying awake.	Insomnia
Energy	Fatigue often	Same
Eating	Craving for carbohydrates and sweet foods	Loss of appetite
Weight	Increase	Decrease
Concentration	Difficult to concentrate often with additional memory impairment	Same
Mood	Low mood during the winter, often severe. Remitting in the summer.	Persistent low mood
Feelings	Sense of misery, loss of self-esteem, apathy and flat effect	Same

Said M. Seasonal affective disorder. Priory Lodge Education, Ltd.; c1994-2004 [updated 2001 Jan; cited 2006 Nov 20]. Available from: http://www.priory.com/psych/SAD.htm

Important Dates in December:



- World AIDS Day- 1st
- Aplastic Anemia Awareness Week- 1st-7th
- National Handwashing Awareness Week- 2nd-8th
- Hanukkah- 16th-23rd
- Christmas- 25th
- Kwanza- 26th- Jan 1st
- New Year's Eve- 31st



The last "dose"...

"Happy Christmas to all, and to all a good-night."

"Twas the Night before Christmas"

[first published December 23, 1823 by the Sentinel, a New York newspaper.]

-Clement Clarke Moore [1779 – 1863]



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