

Abstracts on Seasonal Affective Disorder (S.A.D.)

Meesters Y, Lambers PA, Jansen JH, Bouhuys AL, Beersma DG, van den Hoofdakker RH. *J Affect Disord.* 1991 Oct;23(2):75-9.

Can winter depression be prevented by light treatment?

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The administration of light at the development of the first signs of a winter depression appears to prevent it from developing into a full-blown depression. No patient from a group of 10 treated in this way developed any signs of depression during the rest of the winter season, while five of seven patients from a control group became depressed and needed treatment during the winter season.

Eagles JM, Wileman SM, Cameron IM, Howie FL, Lawton K, Gray DA, Andrew JE, Naji SA.

Seasonal affective disorder among primary care attenders and a community sample in Aberdeen. *Br J Psychiatry.* 1999 Nov;175:472-5.

Royal Cornhill Hospital, Aberdeen.

BACKGROUND: There are no large published studies of the prevalence of seasonal affective disorder (SAD) among UK populations. **AIM:** To determine the prevalence of SAD among patients attending a general practitioner (GP). **METHOD:** Patients aged 16-64 consulting their GPs in Aberdeen during January were screened with the Seasonal Pattern Assessment Questionnaire (SPAQ). SPAQs were also mailed to 600 matched patients, who had not consulted their GP during January. Surgery attenders who fulfilled SPAQ criteria for SAD were invited for interview to determine whether they met criteria for SAD in DSM-IV and the Structured Interview Guide for the Hamilton Rating Scale for Depression--Seasonal Affective Disorder Version (SIGH-SAD). **RESULTS:** Of 6161 surgery attenders, 4557 (74%) completed a SPAQ; 442 (9.7%) were SPAQ cases of SAD. Rate of caseness on the SPAQ did not differ between surgery attenders and non-attenders. Of 223 interviewed SPAQ cases of SAD, 91 (41%) also fulfilled DSM-IV and SIGH-SAD criteria. **CONCLUSIONS:** There is a high prevalence of SAD among patients attending their GPs in January in Aberdeen; this is likely to reflect a similar rate in the community.

Dalgleish T, Rosen K, Marks M.

Rhythm and blues: the theory and treatment of seasonal affective disorder. *Br J Clin Psychol.* 1996 May;35 (Pt 2):163-82

Medical Research Council Applied Psychology Unit, Cambridge, UK.

Seasonal affective disorder (SAD) is a depressive disorder which occurs during the winter and remits in the spring and summer. It differs from non-seasonal depression in its seasonal variation and in the presence of neurovegetative symptoms such as increased appetite and hypersomnia. This review is aimed at clinical practitioners and presents a detailed description of the syndrome before discussing the assessment of SAD and the current treatment of choice of phototherapy. Particular attention is paid to the important issue of differential diagnosis during assessment and the practicalities involved in the administration of light therapy during treatment.

Saeed SA, Bruce TJ.

Seasonal affective disorders. Am Fam Physician. 1998 Mar 15;57(6):1340-6, 1351-2.

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Seasonal affective disorder is a pattern of major depressive episodes that occur and remit with changes in seasons. It may be seen in major depressive or bipolar disorders, as described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). The most recognized form of seasonal affective disorder, "winter depression," is characterized by recurrent episodes of depression, hypersomnia, augmented appetite with carbohydrate craving, and weight gain that begin in the autumn and continue through the winter months. Physicians have many options for treating seasonal affective disorder. While questions regarding the validity of seasonal affective disorder as a syndrome and the mechanism of action of light therapy continue to be investigated, the established effectiveness of light therapy in patients with winter depression supports the usefulness of assessment for this seasonal pattern and consideration of light therapy as an option in addition to existing treatment choices.

Gysin F, Gysin F, Gross F.

Winter depression and phototherapy. The state of the art. Acta Med Port. 1997 Dec;10(12):887-93. [Article in Portuguese]

Winter depression (seasonal affective disorder, SAD) is characterised by a seasonal major depressive episode in the last 2 years. Hypersomnia, carbohydrate-craving and weight-gain are specific traits. These patients preferentially seek help from their General Practitioner. Current research on the aetiology of SAD covers fields such as retinal deficiency, phase-disturbance of the internal circadian rhythms given by internal oscillators and neuro-endocrinologically expressed disorders, assuming that melatonin is the main mediator of human circadian systems in the CNS. Disorders of neurotransmitters (serotonin) are another cue. Recent longitudinal studies show a prevalence of seasonal depressive symptoms in up to 10% of the general population. Among patients treated for depression, the prevalence of SAD is even higher. The SAD sex-ratio of women to men of 3 to 1 is found repeatedly. SAD becomes rare above the age of 50. Effectiveness of phototherapy is showed in nearly all controlled studies. Bright light appears to be most effective for patients with mild SAD. Hypersomnia and hyperphagia seem to be predictors of response to bright light therapy. To enable evaluation of unspecific therapeutic factors in phototherapy a true placebo for bright light-studies is still to be found. Possible new indications for photo therapy are currently being explored. Bright light for non- seasonal depression has been tested with encouraging results; panic disorders seem to have features in common with SAD; effectiveness in bulimia has been suggested and recently sleep disorders in elderly patients have been successfully and substantially diminished

Attar-Levy D.

Seasonal depression Rev Prat. 1997 Nov 1;47(17):1899-903.

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Seasonal affective disorder (SAD) is a condition characterized by annually occurring major depressive episodes which was described by Rosenthal et al. in 1984. It occurs most commonly in women and the onset usually being in early adulthood. These episodes are regularly occurring in fall and winter with full remission during the following spring and summer. The patient's mood is a combination of depression and mild anxiety accompanied by fatigue, loss of libido, and a profound reduction of socialisation. During winter depression, most of these patients complain of atypical vegetative symptoms accompanied by hypersomnia, hyperphagia, carbohydrate craving, and weight gain. Hypotheses on the underlying mechanisms of these behavioral and neurovegetative disorders indicate that environmental variables, e.g., climate, latitude, light, and changes in neurotransmitter fraction that naturally occur with the seasons may be important. Phototherapy is being increasingly used for the treatment of seasonal affective disorder. The antidepressant effect of light therapy in the treatment of SAD has been widely shown. The response in patients with SAD is contingent on the exposure of the patients' eyes to light. Further important factors are the duration of daily treatment and light intensity. However, the role of timing of phototherapy remains controversial. The biological basis of the diverse psychological and biological changes in SAD and the underlying mechanisms of action of phototherapy are still unclear and require further study.

Tam EM, Lam RW, Levitt AJ.

Treatment of seasonal affective disorder: a review. Can J Psychiatry. 1995 Oct;40(8):457-66.

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OBJECTIVE: To review the status of current treatment of seasonal affective disorder (SAD). **METHOD:** Treatment studies of SAD published between January 1989 and March 1995 were identified using a computerized MEDLINE literature search. Additional citations were obtained from the reference sections of these articles. Studies included in this review were selected using operational methodologic criteria. **RESULTS:** Many studies support the efficacy of bright light therapy using a fluorescent light box. The best studied protocol is > 2500 lux white light for 2 hours per day, but newer protocols using 10,000 lux for 30 minutes have comparable response rates. Studies of light visors and other head-mounted devices also report similar response rates, but have not yet shown superiority over putative control conditions. There are fewer medication studies in SAD, but controlled studies suggest that fluoxetine, d-fenfluramine and propranolol are effective. Other treatments such as dawn simulation require further study. No studies of psychological treatments for SAD were found. Many studies had methodologic limitations, including brief treatment periods, small sample sizes, and lack of replication, that limit the generalizability of findings. **CONCLUSION:** There are several well-studied, effective treatments for SAD, including light therapy and medications. However, further research must be done to demonstrate sustained treatment response over time, to clarify the intensity-response relationship of light therapy, to clarify the role of light therapy and medications, and to assess combination treatments. Dilsaver SC, Jaeckle RS.

The naturally occurring rhythm of blues: winter depression. Ohio Med. 1990 Jan;86(1):58-61.

Ohio State University.

Winter depression, a form of seasonal affective disorder, is a common condition that increases in prevalence in northern areas and in regions with a high proportion of overcast fall and winter days. Parts of Ohio are high-risk areas given the high percentage of overcast days. Winter depression is marked by the onset of recurrent episodes of major depression each fall or winter which spontaneously remit in the spring. The depressive syndrome is often characterized by sadness, anxiety, decreased involvement in work and social activities, increased appetite, carbohydrate craving, weight gain, hypersomnia and psychomotor retardation. This syndrome often responds to treatment with two to six hours per day of full-spectrum bright artificial light. The efficacy of drugs in the treatment of this condition is now being studied at The Ohio State University. A monoamine oxidase inhibitor is effective.

Chung YS, Daghestani AN.

Seasonal affective disorder. Shedding light on a dark subject. Postgrad Med. 1989 Oct;86(5):309-14.

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Seasonal affective disorder (SAD) appears to be a disturbance of circadian rhythm caused by desynchronization between the solar clock and the human biologic clock during seasons of short photoperiods. The supplemental bright light of phototherapy resynchronizes the disturbed rhythm; however, a comprehensive theory to explain the mechanism of phototherapy is lacking. Future research on the action of melatonin and serotonin and the photochemical effect of light in relation to possible circadian rhythm disorders should help us to better understand and treat not only SAD but other conditions such as jet lag, premenstrual syndrome, eating disorder, and carbohydrate-craving obesity.

McIntyre IM, Armstrong SM, Norman TR, Burrows GD.

Treatment of seasonal affective disorder with light: preliminary Australian experience. . Aust N Z J Psychiatry. 1989 Sep;23(3):369-72.

Department of Psychiatry, University of Melbourne, Austin Hospital, Heidelberg, Victoria

Six patients with a history of Seasonal Affective Disorder (SAD) were treated with bright artificial light. Patients presented with at least two consecutive years of loss of energy, difficulty in working, loss of interest in activities, difficulty in concentrating, increased somnolence, over-eating (carbohydrate craving) and depressed mood. All received seven consecutive days of full-spectrum bright light with an intensity greater than 2,500 lux at a distance of three feet. Evening exposure for two hours resulted in significant clinical improvement. The main improvements were a return to normal sleeping patterns, a reduction in eating habits, improved energy level, a desire to continue with interests and activities and an improvement in mood. Possible mechanisms for the clinical effects of bright light treatment are discussed.

Byerley WF, Brown J, Lebegue B.

Treatment of seasonal affective disorder with morning light. 1987 Nov;48(11):447-8.

Department of Psychiatry, University of Utah Medical Center, Salt Lake City 84132. J Clin Psychiatry.

Three subjects afflicted with seasonal affective disorder (winter depression) were treated with 2-hour morning light exposures. Within 2 to 5 days, all responded, and remission of their symptoms was sustained during the 2-month treatment period.

Rosenthal NE, Sack DA, Gillin JC, Lewy AJ, Goodwin FK, Davenport Y, Mueller PS, Newsome DA, Wehr TA.

Seasonal affective disorder. A description of the syndrome and preliminary findings with light therapy. Arch Gen Psychiatry. 1984 Jan;41(1):72-80.

Seasonal affective disorder (SAD) is a syndrome characterized by recurrent depressions that occur annually at the same time each year. We describe 29 patients with SAD; most of them had a bipolar affective disorder, especially bipolar II, and their depressions were generally characterized by hypersomnia, overeating, and carbohydrate craving and seemed to respond to changes in climate and latitude. Sleep recordings in nine depressed patients confirmed the presence of hypersomnia and showed increased sleep latency and reduced slow-wave (delta) sleep. Preliminary studies in 11 patients suggest that extending the photoperiod with bright artificial light has an antidepressant effect.

Sep-Kowalikowa B.

Phototherapy as a supporting treatment in depressive patients Psychiatr Pol. 2002 Nov-Dec;36(6 Suppl):99-108.

I Klinika Chorob Psychiczych AM w Gdansk. [Article in Polish]

Effects of treatment of depression with combined antidepressants and phototherapy and antidepressants alone were compared. Phototherapy was applied 5 days a week, up to 1.5 hour a day, 4500 Lux approximately. Mental status was evaluated by the use of HAMD and BDI in the beginning and after two weeks of treatment. Final results were similar in both groups but in the group treated with combined therapy significant improvement just after the first week of treatment was seen. It can be suggested that phototherapy when applied together with antidepressants may accelerate remission. Particularly good response was seen in patients with bipolar affective disorder. Influence of two kinds of treatment on particular symptoms of depression was different. In patients who were given only antidepressants improvement of sleep and appetite was observed first. Patients treated also with phototherapy reported increase of energy and mood improvement.
