

Psychopharmacology for the Clinician

Psychopharmacologie pratique

To submit questions for this regular feature, please send them to the Journal of Psychiatry & Neuroscience / Revue de psychiatrie & de neuroscience, Canadian Medical Association, 1867 Alta Vista Dr., Ottawa ON K1G 3Y6, Canada; fax 613 729-9545; jpm.office@sympatico.ca. Please include details of any relevant case and your name, address, telephone and fax numbers as well as your email address.

What is the optimal implementation of bright light therapy for seasonal affective disorder (SAD)?

The first issue to address when considering light therapy is to identify those patients most likely to benefit from this particular modality. Whereas many patients with mood disorders will report some worsening of symptoms in fall and winter, a clear onset in that period with complete remission in the spring and summer months is the SAD phenotype that is most likely to respond to light. Patients with more chronic forms of depression or incomplete summer remission are less likely to have a robust response, although they may benefit to some extent (Lam et al, *J Affect Disord* 2001;63:123-32). For patients with true SAD, atypical symptoms such as carbohydrate craving and hypersomnia predict a robust response, whereas melancholic symptoms such as insomnia and weight loss are generally less responsive to light (Terman et al, *Am J Psychiatry* 1996; 153:1423-9).

It is then important to choose an appropriate light therapy unit and to implement a standardized regimen that has been well tested. Patients should use commercially available units specifically designed to treat SAD, because homemade units may not have

the appropriate brightness and/or ultraviolet filtration to ensure safety. The dose of light that has proved to be the most beneficial is 5000 lux hours per day, which could take the form of, for example, 10 000 lux for one half-hour each morning. Most studies indicate that early morning treatment (before 8 am) is optimal.

It is now well established that the therapeutic effect of light is mediated through the eye, although patients should not stare at the units directly. The typical treatment regimen involves sitting comfortably in a quiet setting about 16 inches (41 cm) from the unit, which is usually set on a table at an angle. Patients can read or have breakfast as they use the light. It is important that light therapy be used consistently on a day-to-day basis including weekends.

Light therapy differs from standard antidepressant medication in having a more rapid therapeutic effect, usually within the first several days of treatment. Given this fact, and some variability in the timing of the onset of symptoms from year to year, light therapy is usually implemented as symptoms begin to emerge, rather than as a preventive treatment. Treatment is typically continued through the fall and winter period and discontinued at the time of natural remission in the spring and summer.

Light therapy should not be used in patients taking photosensitizing medications or with significant retinal pathology. For other ophthalmologic conditions, consultation with an ophthalmologist may be needed.

Light therapy is generally well tolerated, with headache, nausea and agitation being the most common side effects. Some patients will not be able to tolerate light therapy because of agitation. In these cases, temporarily decreasing the duration of therapy and/or increasing the distance from the light may be considered. As with other effective antidepressants, hypomania can be induced on occasion in individuals with a bipolar diathesis. There have been case reports of possible ocular damage with bright light treatment, although longer term follow-up studies have not shown ocular damage with light (Gallin et al, *Am J Ophthalmol* 1995;119:202-10). Notwithstanding, ophthalmologic assessment every 2-3 years may be helpful in this regard, particularly in individuals at greater risk for ocular disease.

Robert D. Levitan, MD
Centre for Addiction and Mental Health
University of Toronto
Toronto, Ont.

Competing interests: None declared.

The information in this column is not intended as a definitive treatment strategy but as a suggested approach for clinicians treating patients with similar histories. Individual cases may vary and should be evaluated carefully before treatment is provided.