Letters to the Editor

Evidence for the Efficacy of Bright Light Therapy for Bipolar Depression

TO THE EDITOR: The article by Sit and colleagues (1), published in the February 2018 issue of the *Journal*, reports the high efficacy of antidepressant midday light treatment for bipolar disorder. Bipolar depression is a difficult-to-treat condition, with low success rates of antidepressant drugs (2). We thus welcome midday light treatment as a new treatment option. However, the study infers that antidepressant morning light treatment of bipolar depression can trigger mixed states (3) or is equal to placebo (4), so that its use is contraindicated.

We should not lose sight of a large body of evidence demonstrating that morning bright light treatment for bipolar depression is efficacious and safe. This has been highlighted in a meta-analysis (5) and in two recent randomized placebo-controlled trials (6, 7). Furthermore, a historical review (8) of 41 studies published between 1982 and 2017 administering light treatment to 799 patients with bipolar depression, mostly in the morning, showed that the rate of switch is lower than the 4% switch rate expected during placebo treatment of bipolar depression (9), thus not justifying specific concerns about manic switches after light treatment. Morning timing appears to have been forgotten, leading to an uncomfortable and unjustified either/or situation for midday or morning light treatment.

We wish to emphasize, in the absence of trials directly comparing midday and morning light treatment, that because of its proven efficacy and safety, early morning bright light treatment for bipolar depression, as many of us have used it in everyday clinical practice as an antidepressant adjunct to mood stabilizers, should be recognized as a valid treatment option.

REFERENCES

1. Sit DK, McGowan J, Wiltrout C, et al: Adjunctive bright light therapy for bipolar depression: a randomized double-blind placebo-controlled trial. Am J Psychiatry 2018; 175:131–139
2. Post RM, Leverich GS, Altshuler LL, et al: Differential clinical characteristics, medication usage, and treatment response of bipolar disorder in the US versus the Netherlands and Germany. Int Clin Psychopharmacol 2011; 26:96–106
3. Sit D, Wisner KL, Hanusa BH, et al: Light therapy for bipolar disorder: a case series in women. Bipolar Disord 2007; 9:918–927
4. Dauphinais DR, Rosenthal JZ, Terman M, et al: Controlled trial of safety and efficacy of bright light therapy vs. negative air ions in patients with bipolar depression. Psychiatry Res 2012; 196:57–61
5. Tseng PT, Chen YW, Tu KY, et al: Light therapy in the treatment of patients with bipolar depression: a meta-analytic study. Eur Neuropsychopharmacol 2016; 26:1037–1047
6. Zhou TH, Dang WM, Ma YT, et al: Clinical efficacy, onset time, and safety of bright light therapy in acute bipolar depression as an adjunctive therapy: a randomized controlled trial. J Affect Disord 2018; 227:90–96
7. Yorguner Kupeli N, Bulut NS, Carkaxhiu Bulut G, et al: Efficacy of bright light therapy in bipolar depression. Psychiatry Res 2017; 260: 432–438
8. Benedetti F: Rate of switch from bipolar depression into mania after morning light therapy: a historical review. Psychiatry Res 2018; 261: 351–356
9. Peet M: Induction of mania with selective serotonin re-uptake inhibitors and tricyclic antidepressants. Br J Psychiatry 1994; 164: 549–550

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Light Therapy and Risk of Hypomania, Mania, or Mixed State Emergence: Response to Benedetti et al.

TO THE EDITOR: We chose midday light for our randomized controlled trial of patients with bipolar disorder because of the findings from our pilot study (1). Three of our first four women with depression treated with antimanic drugs rapidly developed mixed states, which necessitated discontinuation of morning light therapy. However, we have recommended morning light therapy for patients who do not respond to 45–60 minutes of midday light therapy. The interpretation that morning light therapy is contraindicated is not consistent with our publications (1, 2).

Morning light therapy can elicit abrupt, large circadian rhythm phase advances that may precipitate bipolar switching, as has been described after eastward jet travel. Midday light therapy is far less likely to induce similar phase shifts and is a conservative initial treatment. The gradual emergence of group differences in our controlled study of midday light therapy (2) contrasts with the rapid improvement often seen with morning light therapy, which may reflect the relative circadian rhythm potency associated with the timing of light therapy.

The claim of "proven efficacy and safety" of early morning bright light treatment for bipolar depression is overstated. Many of the publications on morning light therapy and bipolar disorder in Dr. Benedetti's review (3) included studies of seasonal depression and patients with both unipolar and bipolar disorder. Other studies were constrained by open trial design, lack of a comparator group, brief duration, inclusion of antidepressants with adjunctive light therapy, and light therapy combined with sleep deprivation. Assessing hypomanic or manic symptoms with a valid measure is necessary to quantify the rate of their emergence (4). Only 12 of 43 studies (3) included the administration of a mania scale, which will bias the results toward underestimating the occurrence of mixed states and hypomania.

With due respect to our colleagues, the extensive list of authors who "have used [morning light therapy] in everyday clinical practice" (as have we) cannot supplant controlled clinical trial data. In his comprehensive survey (3), Dr. Benedetti reported that morning light therapy has been compared with placebo for bipolar disorder in only three studies. Using the Young Mania Rating Scale in two of the studies, symptoms were absent or rare, while the third study lacked a standard mania measure. With midday light therapy, we did not observe any mixed states, hypomania or mania, or significant differences in scores on the mania rating scale. Direct comparisons of midday and morning light therapy in a randomized controlled trial, with attention to gender-specific rates and predictors of hypomania or mania and mixed state emergence, would be a valuable contribution.

REFERENCES

1. Sit D, Wisner KL, Hanusa BH, et al: Light therapy for bipolar disorder: a case series in women. Bipolar Disord 2007; 9:918–927
2. Sit DK, McGowan J, Wiltrout C, et al: Adjunctive bright light therapy for bipolar depression: a randomized double-blind placebo-controlled trial. Am J Psychiatry 2018; 175:131–139
3. Benedetti F: Rate of switch from bipolar depression into mania after morning light therapy: a historical review. Psychiatry Res 2018; 261: 351–356
4. Angst J, Adolfsson R, Benazzi F, et al: The HCL-32: towards a self-assessment tool for hypomanic symptoms in outpatients. J Affect Disord 2005; 88:217–233

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Validating the Predictive Accuracy of the NAPLS-2 Psychosis Risk Calculator in a Clinical High-Risk Sample From the SHARP (Shanghai At Risk for Psychosis) Program

TO THE EDITOR: A web-based risk calculator (http://riskcalc.org:3838/napls/) for use in clinical high-risk populations was developed in the second phase of the North American Prodrome Longitudinal Study (NAPLS-2) (1). This calculator