

Letter to the Editor

An open trial of light therapy in hospitalised major depression

Anna Wirz-Justice^{a,*}, Peter Graw^{1,a}, Hugo Rössli^b, Guillermo Glauser^b,
Jörg Fleischhauer^b

^aPsychiatric University Clinic, Basel, Switzerland

^bCantonal Psychiatric Clinic, Lucerne, Switzerland

Sir,

The recent thoughtful overview by Kripke (1998) emphasizes the need for long-term clinical trials of light therapy in non-seasonal depression (non-SAD). A new book on future applications of light therapy beyond SAD also addresses the issue (Lam, 1998). We have promising preliminary findings that support Kripke's contention that light therapy can be rather effective in major depression.

From 1985–88, an open study investigated the usefulness of light therapy in the setting of a psychiatric hospital using a variety of rating scales (Fleischhauer et al., 1988; Rössli, 1993). Non-medicated hospitalised patients who had received the diagnosis of depression (ICD-9) were offered the option of light. The study design was an open 10-day treatment period in a room installed with ceiling lights (intensity at eye level: 4000 lux standing, 3000 lux sitting). Thirty-seven patients entered the study, five dropped out, four had incomplete ratings.

Two groups were studied in consecutive years:

light treatment for 8 hours (5–9am and 4–8pm) or 4 hours (5–9am). The number of responders (defined as >50% decrease in Hamilton Rating Scale [HAM-D] score at day 10) was similar for both durations of light therapy: 7/11 (64%) for 4h and 10/17 (59%) for 8h. Initial HAM-D ratings of 28.1 ± 8.9 (s.d.) declined to 11.7 ± 7.8 on day 10. Daily self-ratings revealed positive effects of light (significant from day 5 onwards) with improved energy ($p = .001$) and sleep quality ($p = .02$) and shortened sleep latency ($p = .03$), with no change in sleep duration or the number of nocturnal awakenings.

The 61% response rate in hospitalised major depressive patients was rather high, similar to that observed in SAD patients (e.g. Terman et al., 1989) and has to be taken cautiously with the many caveats attendant on a study not carried out under blind conditions.

As Kripke emphasises, the “dose” of light has not been optimised, nor has the duration of the treatment been sufficiently long to compare with the time scale conventionally used for drug treatment of severely depressed patients. Our pilot study suggests controlled investigation of a ca. 4h, 3000 lux (or a 2h 10,000 lux) treatment protocol. The longer 8-hour exposition appears unnecessary as well as impracticable. Indeed, in the hospital where this study was carried out, 3h daily light treatment is now routinely

*Corresponding author. Tel.: (41)-61-325-5473; fax: (41)-61-325-5514.

E-mail address: wirz@ubaclu.unibas.ch (A. Wirz-Justice)

¹Supported by Swiss National Science Foundation Grant #32-28741.90.

prescribed. The ease of light therapy, lack of serious side effects, cost effectiveness, possibility of outpatient application, not to mention high acceptance of an attractive non-pharmacological treatment, demands evaluation in a controlled multi-centre trial in non-seasonal major depression.

References

- Fleischhauer, J., Glauser, G., Hofstetter, P., 1988. The influence of light therapy in depressive patients. *Pharmacopsychiat.* 21, 414–415.
- Kripke, D.F., 1998. Light treatment for nonseasonal depression: speed, efficacy, and combined treatment. *J. Affect. Disord.* 49, 109–117.
- Lam, R. (Ed.), 1998. *Seasonal Affective Disorder and Beyond. Light Treatment for SAD and Non-SAD conditions.* American Psychiatric Press, Washington DC.
- Röösl, H., 1993. *Lichttherapie bei hospitalisierten Depressiven. Eine Studie unter Berücksichtigung des Dosis und der Patienten mit und ohne Saisonalität.* M.D. Thesis, University of Basel, Switzerland.
- Terman, M., Terman, J.S., Quitkin, F.M., et al., 1989. Light therapy for seasonal affective disorder: a review of efficacy. *Neuropsychopharmacol.* 2, 1–22.