

Alzheimers and Light

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Effect of light on agitation in institutionalized patients with severe Alzheimer disease.

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OBJECTIVE: Preliminary data suggest that morning bright light might improve symptoms of agitation, a serious problem in patients with dementia. The authors expand on an earlier pilot study by evaluating the effect of bright light therapy on agitated behavior in a large sample of patients with severe dementia. **METHODS:** Ninety-two patients were randomly assigned to morning bright light, morning dim red light, or evening bright light. Agitation was rated by research staff who observed the patients every 15 minutes throughout the treatment period and by caregivers at one time-point before and one time-point after treatment. **RESULTS:** Morning bright light delayed the acrophase of the agitation rhythm by over 1.5 hours. Bright light was associated with improved caregivers' ratings but had little effect on observational ratings of agitation. **CONCLUSION:** Although the result that light shifted the peak of the agitated behavior might be generalizable to patients with milder forms of AD, the fact that agitation was not ameliorated might not be. Because the suprachiasmatic nucleus (SCN) of patients with severe AD is likely to be more degenerated, and the circadian activity rhythms deteriorate as the disease progresses, it is still possible that patients with more intact SCNs, that is, patients with mild or moderate AD, might benefit from light treatment even more than those with severe AD.