

Journal of Clinical Oncology

jco.ascopubs.org

Published online before print January 13, 2014, doi: 10.1200/JCO.2013.49.3437
JCO February 20, 2014 vol. 32 no. 6 557-563

© 2014 by American Society of Clinical Oncology

Randomized Controlled Trial of a Cognitive-Behavioral Therapy Plus Hypnosis Intervention to Control Fatigue in Patients Undergoing Radiotherapy for Breast CancerGuy H. Montgomery[†], Daniel David, Maria Kangas, Sheryl Green,
Madalina Sucala, Dana H. Bovbjerg, Michael N. Hallquist and Julie B. Schnur

✚ Author Affiliations

Corresponding author: Guy H. Montgomery, PhD, Department of Oncological Sciences, Box 1130, Icahn School of Medicine at Mount Sinai, 1425 Madison Ave, New York, NY 10029-6574; e-mail: guy.montgomery@mssm.edu.**Abstract**

Purpose The objective of this study was to test the efficacy of cognitive-behavioral therapy plus hypnosis (CBTH) to control fatigue in patients with breast cancer undergoing radiotherapy. We hypothesized that patients in the CBTH group receiving radiotherapy would have lower levels of fatigue than patients in an attention control group.

Patients and Methods Patients (n = 200) were randomly assigned to either the CBTH (n = 100; mean age, 55.59 years) or attention control (n = 100; mean age, 55.97 years) group. Fatigue was measured at four time points (baseline, end of radiotherapy, 4 weeks, and 6 months after radiotherapy). Fatigue was measured using the Functional Assessment of Chronic Illness Therapy (FACIT) –Fatigue subscale and Visual Analog Scales (VASs; Fatigue and Muscle Weakness).

Results The CBTH group had significantly lower levels of fatigue (FACIT) at the end of radiotherapy (z, 6.73; $P < .001$), 4-week follow-up (z, 6.98; $P < .001$), and 6-month follow-up (z, 7.99; $P < .001$) assessments. Fatigue VAS scores were significantly lower in the CBTH group at the end of treatment (z, 5.81; $P < .001$) and at the 6-month follow-up (z, 4.56; $P < .001$), but not at the 4-week follow-up ($P < .07$). Muscle Weakness VAS scores were significantly lower in the CBTH group at the end of treatment (z, 9.30; $P < .001$) and at the 6-month follow-up (z, 3.10; $P < .02$), but not at the 4-week follow-up ($P < .13$).

Conclusion The results support CBTH as an evidence-based intervention to control fatigue in patients undergoing radiotherapy for breast cancer. CBTH is noninvasive, has no adverse effects, and its beneficial effects persist long after the last intervention session. CBTH seems to be a candidate for future dissemination and implementation.

Footnotes

Supported by National Cancer Institute Grants No. CA131473, CA159530, CA081137, CA166042, and CA129094, and by American Cancer Society Grant No. RSGPB-04-213-01-CPPB. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer Institute, National Institutes of Health, or American Cancer Society.

Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

Articles citing this article**Hypnosis in Breast Cancer Care: A Systematic Review of Randomized Controlled Trials***Integr Cancer Ther* Jan 1, 2015:5-15[\[Abstract\]](#) [\[PDF\]](#)**Laying to Rest Psychostimulants for Cancer-Related Fatigue?***JCO* Jun 20, 2014:1865-1867[\[Full Text\]](#) [\[PDF\]](#)<http://jco.ascopubs.org/content/32/6/557.short#>

Advertiser

Advertiser