A Pilot Investigation of Guided Self-Hypnosis in the Treatment of Hot Flashes Among Postmenopausal Women

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A PILOT INVESTIGATION OF GUIDED SELF-HYPNOSIS IN THE TREATMENT OF HOT FLASHES AMONG POSTMENOPAUSAL WOMEN¹,²

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Abstract: Previous research has demonstrated that a hypnotic intervention can reduce hot flashes, a significant problem for some women. Based on the authors’ previous research, the present study was developed to evaluate the feasibility of a guided self-hypnosis intervention for hot flashes. Thirteen postmenopausal women received 5 sessions of guided self-hypnosis in which all hypnotic inductions were recordings. Guidance regarding symptom monitoring, individualization of mental imagery, and practice of self-hypnosis were provided. Hot flashes were determined through diaries. Results indicated average frequency of hot flashes decreased by 72% (p < .001) and hot-flash scores decreased by 76% (p < .001) on average. Guided self-hypnosis reduced perceived hot flashes in the pilot study with postmenopausal women supporting the possible feasibility and potential benefit of the intervention.

The occurrence of hot flashes, or vasomotor symptoms, represents a major burden for postmenopausal women. Hot flashes are often felt as sudden waves of heat that begin around the face, neck, and chest and may travel from the upper body down to the feet (Barton & Loprinzi, 2004; Moe, 2004). The degree of discomfort can range from mild to severe and can be influenced by the intensity of the heat felt, the

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level of perspiration following the hot flash, and increased heart rate levels (Moe, 2004). These episodes have the ability to severely impact an individual’s quality of life and are often accompanied by feelings of fatigue (O’Bryant, Palav, & McCaffrey, 2003), dysphoria, depression (Pearson, 2010), anxiety (Baker, Simpson, & Dawson, 1997), decreased libido (Sterns et al., 2002), and a loss of control (Hunter & Liao, 1995). Certain factors, such as sleep hygiene, genetics, body mass index, diet, weather, and stress level, have all been found to influence the number and intensity of hot flashes experienced (Moe, 2004).

The current standard of care for the control of hot flashes is hormone therapy. Although hormone therapy has shown to be very effective in controlling hot flashes (MacLennnan, 2009), there is growing resistance to hormone therapy, given findings of an associated 1.2–2 fold increase in the risk of developing breast cancer, as well as an increased risk in developing cardiovascular disease (Working Group for the Women’s Health Initiative Investigators, 2002).

Research has been conducted to assess the potential risks and benefits of using antidepressants to control hot flashes (e.g., Loprinzi et al., 2005). These studies have produced evidence suggesting that antidepressants are an effective treatment option (Loprinzi et al., 2000). However, potential side effects and food and drug interactions continue to pose a risk for patients and may lead to noncompliance (Nelson et al., 2006).

With the inherent limitations of these more traditional treatment options, it becomes apparent that there is a need for an easily accessible treatment that poses minimal risk to patients. Avis (2008) has argued that mind-body therapies should be investigated for their effectiveness in treating vasomotor symptoms. She cites their relative cost efficiency, as well as the fact that several mind-body therapies are thought to pose either minimal or no risk to the patient as aspects that should prove appealing to both patients and physicians seeking alternative treatment options. This may be especially true when we consider that adverse events are the primary cause of nonadherence to traditional hormone therapy. In fact, recent sampling suggests that anywhere from 25% to 55% of women refuse to continue traditional treatments due to adverse events (Cella & Fallowfield, 2008).

Hypnosis may be a particularly effective mind-body option for treatment of hot flashes (Greenfield, 2011). Elkins et al. (2008) have provided evidence indicating that hypnosis, when individually delivered by a trained hypnotherapist, may be a safe and effective treatment option for women suffering from hot flashes. Results indicated that after 5 weeks of treatment, women who had received hypnosis reported a 68% reduction in hot-flash severity and intensity (Elkins et al., 2008). Further, patients receiving hypnosis reported significant improvements in their
The findings to date indicate that hypnosis can be an effective treatment for hot flashes when consisting of individually delivered hypnotic inductions. However, intervention is time and resource intensive. If the intervention could be provided through guided self-hypnosis without “live” hypnotic inductions, it would be much easier to provide on a large scale, and it could then become more widely disseminated. The present pilot study examined the feasibility and potential benefit of guided self-hypnosis for treatment of hot flashes.

**Method**

Participants consisted of 13 postmenopausal women suffering from either a minimum of 50 hot flashes per week or at least seven moderate-to-severe hot flashes per day. Participants were recruited into the study by means of a combination of billboard and newspaper advertisements. Participants were excluded from the study if they were currently using any treatment regimen to obtain relief for their vasomotor symptoms, including, but not limited to, pharmacotherapy, hypnosis, or any other form of complementary or alternative medicine. Participants were also excluded if their follicle stimulating hormone level was below 40 or if they failed to qualify as postmenopausal for any other reason. After screening, participants were provided with an informed-consent document. After obtaining a participant’s signature, treatment sessions were scheduled.

Participants completed a Hot Flash Symptoms Diary (Sloan et al., 2001) at baseline and throughout Sessions 1 through 5. Diaries were used to record self-report of hot-flash frequency and severity. Participants were asked to record the number and severity of each hot flash in each 24-hour period over each 7-day week. Frequency of hot flashes and an average hot-flash score were determined. The hot-flash score is a compositional score created as a product of average hot-flash frequency by the average hot-flash severity.

Participants received five weekly sessions of guided self-hypnosis. At each session, the participant met with a research coordinator who collected hot-flash diaries and materials and then accompanied the participant to a quiet consultation room, furnished with a recliner. The participant was provided with an audio recording of a hypnotic induction. The induction consisted of an approximately 30-minute recording with hypnotic suggestion for mental imagery involving coolness, hypnotic relaxation, and symptom reduction. At each session,
the participant received guidance on home practice with the CD recording and questions were answered. At the third session, participants received instructions for brief self-hypnosis without an audio recording and were tasked with practicing self-hypnosis using this technique in addition to their use of the guided self-hypnosis audio recordings.

**Results**

The mean age of the sample was 55.23 ($SD = 5.00$) years. Participants identified their race/ethnicity as African American (1, 7.7%), Hispanic (1, 7.7%), Asian/Pacific Islander (1, 7.7%), White/Non-Hispanic (10, 76.9%). Two participants (15.4%) were single, 8 participants (61.5%) reported as married, 1 (7.7%) was separated, and 1 participant (7.7%) was widowed.

Hot-flash scores and frequencies were plotted from baseline to Session 5, with percentage reductions calculated (Table 1). Paired $t$ tests were run for mean differences in hot-flash frequency scores, indicating that there was a significant mean reduction in hot-flash frequency posttreatment ($p < .001$, 95% CI: 52.3, 79.53). Mean difference in hot-flash score was also found to be significantly reduced ($p < .001$, 95% CI: 11.8, 25.1).

As shown in Figure 1, hot-flash frequency showed an average 72% decline posttreatment. Hot-flash scores (a product of self-reported hot-flash frequency x severity) indicate a 76% decrease posttreatment (Figure 2).

**Discussion**

The results of a trial of a therapist-delivered hypnotic intervention of hypnosis reported an average 68% reduction in hot flashes in breast cancer survivors (Elkins et al., 2008). The results of this study suggest that a guided self-hypnosis method using audio recorded hypnotic inductions may prove just as effective. This pilot study demonstrates the potential effectiveness and feasibility of guided self-hypnosis in reducing hot flashes in postmenopausal women. In this pilot investigation, guided self-hypnosis reduced perceived hot flashes among postmenopausal women. These results are encouraging and suggest that guided self-hypnosis is feasible and is potentially effective. However, further study is needed to determine the effect of guided self-hypnosis on physiologically measured and self-reported hot flashes, as well as sleep quality, anxiety, and quality of life. An adequately powered, randomized, and controlled trial of guided self-hypnosis is required. This remains as
Table 1

*Paired sample t test for mean difference: Hot-Flash Frequency p < .001, 95% CI (52.3, 79.53); Hot-Flash Score p < .001, 95% CI (12.39, 25.27).
Figure 1. This figure represents reductions in weekly hot-flash frequency taken from hot-flash daily diaries (color figure available online).

Figure 2. This figure represents weekly reductions in hot-flash score, a product of hot-flash frequency and participant’s ratings of hot-flash severity (color figure available online).
a critical step in building a model for a hypnosis intervention for controlling hot flashes that could achieve translation to wide clinical dissemination. Also, placebo effects, expectancy, and the role of hypnotizability have not yet been examined.

References


Eine Pilotuntersuchung zu geführter Selbsthypnose in der Therapie von Hitzewallungen bei postmenopausalen Frauen

Gary Elkins, Aimee Johnson, William Fisher, Jim Sliwinski und Timothy Keith

Abstrakt: Vorangegangene Forschung hat gezeigt, daß eine hypnotische Intervention Hitzewallungen, ein signifikantes Problem für einige Frauen, reduzieren kann. Basierend auf der vorangegangenen Forschung des Autors wurde die aktuelle Studie entwickelt, um die Untersuchbarkeit einer geführten selbsthypnotischen Intervention für Hitzewallungen zu untersuchen. Dreizehn postmenopausale Frauen erhielten fünf Sitzungen geführter Selbsthypnose, bei der alle hypnotischen Induktionen vom Band kamen. Es wurde eine Anleitung bezüglich Symptombeobachtung, Individualisierung mentalen Bilderlebens und der Praxis der Selbsthypnose gegeben. Hitzewallungen wurden durch Tagebücher bestimmt. Die Ergebnisse zeigten, daß die mittlere Anzahl von Hitzewallungen um 72 % ($p < 0,001$) und die Ergebnisse im Hitzewallungsscore im Mittel um 76 % ($p < 0,001$) sanken. Geführte Selbsthypnose reduzierte die wahrgenommenen Hitzewallungen in der Pilotstudie mit postmenopausalen Frauen was eine mögliche Umsetzbarkeit und potentiellen Nutzen der Intervention darstellt.

Stephanie Reigel, MD

Une étude pilote d’autohypnose guidée dans le traitement des bouffées de chaleur chez des femmes ménopausées

Gary Elkins, Aimee Johnson, William Fisher, Jim Sliwinski et Timothy Keith

Résumé: Des recherches ont permis de démontrer qu’une intervention hypnotique peut atténuer les bouffées de chaleur, lesquelles incommodent sérieusement certaines femmes. Cette étude, fondée sur des recherches précédentes des auteurs, a été élaborée afin d’évaluer la faisabilité d’une intervention autohypnotique guidée pour soulager les bouffées de chaleur. Treize femmes ménopausées ont fait l’objet de cinq séances d’autohypnose guidée, où toutes les inductions hypnotiques étaient enregistrées. Ces femmes ont été guidées dans la surveillance de leurs symptômes, l’individualisation de l’imagerie mentale et la pratique de l’autohypnose. La présence et l’intensité des bouffées de chaleur étaient notées dans des registres quotidiens. Les résultats indiquent que la fréquence moyenne des bouffées de chaleur avait diminué de 72 % ($p < 0,001$) et que les scores des bouffées de chaleur avaient baissé de 76 % ($p < 0,001$) en moyenne. L’autohypnose guidée a réduit la perception des bouffées de chaleur dans le cadre de cette étude pilote menée auprès de femmes ménopausées, appuyant l’éventualité de la faisabilité et des avantages potentiels de cette intervention.

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Investigación piloto de autohipnosis guiada en el tratamiento de bochornos en mujeres posmenopáusicas

Gary Elkins, Aimee Johnson, William Fisher, Jim Sliwinski, y Timothy Keith

Resumen: La investigación ha demostrado que una intervención hipnótica puede reducir los bochornos, un problema significativo para algunas mujeres. Basado en las investigaciones anteriores del autor, el presente estudio se desarrolló para evaluar la viabilidad de una intervención autohipnótica guiada para los bochornos. Trece mujeres posmenopáusicas recibieron 5 sesiones de autohipnosis guiada en donde todas las inducciones hipnóticas estaban grabadas. Los bochornos se determinaron a través de diarios. Los resultados indican que la frecuencia de bochornos se redujo en un 72% (p < .001) y las puntuaciones de los bochornos decrecieron en promedio un 76% (p < .001). La autohipnosis guiada redujo la percepción de bochornos en el estudio piloto con mujeres posmenopáusicas, sustentado la posible viabilidad y el beneficio potencial de la intervención.

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