

Acupuncture Surpasses Drug For Hot Flashes And Insomnia

21 MAY 2017

Acupuncture is more effective than medications for improving sleep quality in survivors of breast cancer. University of Pennsylvania (Philadelphia), Memorial Sloan Kettering Cancer Center (New York), and Memorial University (Newfoundland and Labrador) researchers determined that electroacupuncture outperforms gabapentin for improving sleep latency and efficiency for female breast cancer survivors with hot flashes. In a controlled clinical trial, the researchers conclude that acupuncture improves sleep duration and significantly improves the length of time needed to transition from full wakefulness to restful sleep (sleep latency).



The researchers determined several other benefits provided by acupuncture to breast cancer survivors with hot flashes. Acupuncture reduces sleep disturbances, decreases daytime dysfunction, and improves sleep efficiency. Based on the data, the researchers conclude that acupuncture improves overall sleep quality. In addition, acupuncture does not produce adverse effects associated with gabapentin (e.g., dizziness, fatigue, ataxia) or venlafaxine (e.g., dry mouth, constipation, headaches). The researchers demonstrate that acupuncture produces superior positive patient outcomes without the undesirable adverse effects associated with medications. The research was published in *Menopause: The Journal of The North American*

Menopause Society and was supported, in part, by a grant from the US National Institutes of Health (NIH).

It is estimated that there will be approximately 6 million breast cancer survivors in the US by the year 2020. Breast cancer survivors have a higher rate of hot flashes and comorbid sleep disturbances compared with women that do not suffer from breast cancer. This is due to several factors including several forms of cancer treatments: hormone therapy (e.g., tamoxifen, aromatase inhibitors), chemotherapy, surgery.

The researchers provide background for the initiation of the study. They cite recent clinical trials demonstrating that acupuncture “is an effective treatment for hot flashes in breast cancer survivors with few, if any, side effects.” They add that the quality of evidence is high because the conclusions were drawn from double blind, randomized, placebo controlled investigations. Of these prior investigations, they add that several find acupuncture effective for improving sleep quality and duration.

The focus of their intervention was to determine the efficaciousness of an established pharmacological intervention versus that of electroacupuncture. The researchers note that electroacupuncture was chosen for one arm of the investigation because prior investigations demonstrate that electroacupuncture affects endorphin and neuropeptide levels. The second arm of the investigation was administration of gabapentin, based on its successful implementation in usual care.

Two experienced licensed acupuncturists were chosen to implement acupuncture therapy. The first acupuncturist had eight years of prior clinical experience and the second acupuncturist had twenty years of clinical experience. The choice of using licensed acupuncturists seems obvious, however; it is important to note that there exists other studies that do not use any Traditional Chinese Medicine (TCM) principles for acupoint selection or application. There are studies in which no licensed acupuncturists are involved, but rather academics with little to no experience in the field of acupuncture. As a result, their outcomes are predictably poor. The investigation we are examining in this article, by contrast, is an authentic and well-designed model without bias.

Participants received acupuncture twice per week for the first two weeks. Next, weekly acupuncture therapy sessions were administered

for an additional six weeks. This totaled ten acupuncture treatments over an eight week period.

The choice of acupoints was determined on a patient by patient basis, consistent with clinical practice in a standard acupuncturist clinic. Manual acupuncture techniques were applied to obtain deqi at the acupoints and electroacupuncture was applied between two acupoints (not specified in the research document) with a 2 Hz frequency setting. Needles were retained for thirty minutes per acupuncture session. All needles were Seirin brand filiform needles of a 0.25 mm gauge and either a 30 or 40 mm length. For patients receiving drug therapy, gabapentin was administered daily (900 mg).

The researchers conclude that “EA [electroacupuncture] produces comparable, if not better, improvements in sleep quality than GP [gabapentin], a currently recommended pharmacological intervention.” The researchers note that electroacupuncture produced superior patient outcomes for the improvement of sleep quality. They add, “women receiving EA reported were able to fall asleep faster and spent more time in bed sleeping as opposed to lying awake in bed trying to sleep. Our results suggest that EA results in improved sleep in women with hot flashes and might be a viable treatment option in women who do not wish to take medication.”

The researchers discussed various aspects of acupuncture related to the study. They cite evidence demonstrating that acupuncture affects “a number of neurotransmitters and hormonal factors associated with sleep, such as serotonin, melatonin, and gamma-aminobutyric acid.” They add that acupuncture potentially increases slow wave sleep time and repairs fragmented sleep architecture. As a result of these improvements in sleep, subjects perceive “a deeper and more restorative sleep.” Furthermore, the researchers note that prior investigations demonstrate that acupuncture is more effective than benzodiazepines. Acupuncture produces a 91% positive patient outcome rate and benzodiazepines produce a 75% positive patient outcome rate for the treatment of insomnia. In addition, a prior investigation finds acupuncture equally effective as zolpidem for improvement of sleep.

The researchers discovered a bidirectional nature of hot flashes and insomnia. Improvements in sleep quality produce reductions in hot flashes. Likewise, reductions in hot flashes improve sleep quality. The

researchers postulate that successful interventions for the treatment of hot flashes and insomnia will “positively impact other areas of functioning as well.”

The takeaway from this study is that acupuncture is effective for the treatment of insomnia and hot flashes for breast cancer survivors. Also, acupuncture presents a treatment option absent the adverse effects associated with conventional medications.

References

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