Comparing Acupuncture and Cognitive Behavioral Therapy to Treat Insomnia among Cancer Survivors -- The CHOICE Trial

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What was the research about?
Cancer survivors often have insomnia. Insomnia causes patients to have trouble falling or staying asleep. Medicines that treat insomnia can cause side effects, such as feeling sluggish or having memory problems. Because of the side effects, some patients choose to treat insomnia without medicine.

In this study, the research team compared two non-medicine treatments for insomnia:

• Acupuncture involves inserting small needles into different parts of the body to treat health problems.

• Cognitive behavioral therapy for insomnia, or CBT-I, helps teach patients how to deal with thoughts that keep them awake. CBT-I also helps patients follow healthy sleep habits and change behaviors that make insomnia worse.

The research team wanted to learn if one treatment worked better to reduce insomnia among cancer survivors. They also looked at pain, fatigue and anxiety, symptoms of depression, and quality of life.

What were the results?
Overall, both acupuncture and CBT-I reduced patients’ insomnia. CBT-I reduced insomnia more than acupuncture. The research team also found that CBT-I worked better than acupuncture to reduce insomnia for patients with specific traits. These patients included men and patients who were white, highly educated, and without pain at the start of the study.

Acupuncture reduced pain more than CBT-I at the end of treatment. Patients who received acupuncture or CBT had the same amount of improvement in

• Fatigue and anxiety

• Symptoms of depression

• Quality of life

Who was in the study?
The study included 160 cancer survivors with insomnia. Of these, 71 percent were white, 28 percent were black, and 2 percent were other races. The average age was 62, and 57 percent were women. Patients lived near cancer centers in Philadelphia and New York City. All had finished cancer treatment.

What did the research team do?
The research team assigned patients, by chance, to one of two groups. In the first group, patients received one 60-minute and nine 30-minute acupuncture treatments. In the second group, patients received one 60-minute and six 30-minute CBT-I sessions. Patients in each group received treatment for eight weeks.
Patients filled out surveys before treatment and again at 8 and 20 weeks after treatment. The surveys asked patients about their insomnia. In addition, the surveys asked about pain, fatigue and anxiety, symptoms of depression, and quality of life.

Eight cancer survivors who had insomnia gave input on the study.

**What were the limits of the study?**
Because patients knew what treatment they were receiving, the team can't be sure that people's beliefs and expectations didn't influence the findings. The study included only cancer survivors. Results may differ for patients with other health problems.

Future research can look at how to tailor insomnia treatment for patients with specific traits, such as patients with advanced cancer.

**How can people use the results?**
Cancer survivors and their doctors can use the results when considering ways to treat insomnia without medicine.

*To learn more about this project, visit www.pcori.org/Mao250.*