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Acupuncture: A Comparison Study of Sham Acupuncture, Traditional Chinese Acupuncture and Current Practice Guidelines for the Treatment of Chronic Musculoskeletal Pain in Adults

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Chronic musculoskeletal pain is difficult to treat. Physiology is a large component of understanding how and if acupuncture was found more effective than sham therapy. Chinese acupuncture vs. sham therapy, 3.4% (P = .39) 

Excitatory neurotransmitters


Private practices, not associated with a medical entity

Limited treatment options; pain medication, physical therapy and surgery

Investing in integrative therapies such as acupuncture may provide additional treatment options.

Statement of the Problem

Chronic musculoskeletal pain is difficult to treat. Current practice guidelines lead to prescription medication overuse and ineffective surgeries. Identify therapies that provide patient with safe and effective improvement in their pain is important for better patient outcomes.

In adult patients with chronic musculoskeletal pain, do therapies in integrative medicine such as traditional Chinese acupuncture improve pain compared to traditional western medicine?

Pathophysiology

The gate control theory is a balance of impulses transmitted to the spinal cord via large A-delta and small C fibers. Limited treatment options; pain medication, physical therapy and surgery

Investing in integrative therapies such as acupuncture may provide additional treatment options.

Comparing traditional Chinese acupuncture to conventional therapy, 20.2% (P < .001) 

Vickers, 2012, and Manheimer, 2005, who discuss through the use of functional magnetic resonance imaging to identify therapies that improve pain.

In adult patients with chronic musculoskeletal pain, do therapies in integrative medicine such as traditional Chinese acupuncture improve pain compared to traditional western medicine?

References

Cherkin, 2009, performed an eight week randomized control study of 477 adults. At 8 weeks, functionality scores for individualized, standardized, and simulated acupuncture groups improved by 4.4, 4.5, and 4.4 points compared to 2.1 points for patients receiving usual care. At 52 weeks, the usual care group had significantly more participants report decreasing their activity. Decreased medication use to 47% in the real and simulated acupuncture groups compared to 59% in the usual care group 

Brinkhaus, 2009, performed a randomized, control, multicenter trial of 298 adult patients, ages 40-75 years. Found no statistical significance between acupuncture and minimal acupuncture (P=0.26), did find a statistical significance between acupuncture and the control group (P=0.001) Most commonly reported adverse events were hematoma and bleeding. 

Witt et al., 2006 performed a study with 11,630 subjects. The absolute risk reduction was 25.8%, and the number needed to treat was 4. Haake, 2007, A randomized, multicenter, blinded, parallel-group trial was conducted using 1,162 adult subjects. Comparing groups for pain improvement: 

Chinese acupuncture vs. sham therapy, 3.4% (P = .39) 

Chinese acupuncture vs. conventional therapy, 20.2% (P < .001) 

Sham vs. conventional therapy, 16.8% (P < .001) 

Chinese acupuncture is not superior to sham acupuncture. Both true and sham acupuncture is statistically significant compared to the control. 

Manheimer, 2005, performed a systematic review of 33 studies. Acupuncture was found more effective than sham therapy. Acupuncture more effective than no additional treatment. Dose of acupuncture is important; longer treatment session doesn’t prove to be more beneficial for patient outcomes. The use of electricity can improve outcomes, along with the number of treatment sessions.

Downfalls of this treatment:

Large percentage develops into chronic pain conditions.


Vickers, 2012, and Manheimer, 2005, who discuss through the use of functional magnetic resonance imaging to identify therapies that improve pain.

In adult patients with chronic musculoskeletal pain, do therapies in integrative medicine such as traditional Chinese acupuncture improve pain compared to traditional western medicine?

Applicability to Clinical Practice

Acupuncture as a therapy that can be an adjunct to a variety of other therapies.

Improving patients pain, by including other modalities such as chiropractic manipulation and massage

With minimal adverse effects, acupuncture is a safe addition to the treatment plan.

By incorporating integrative medicine into a traditional western medicine practice

Open up many avenues for treating an individual’s pain

Patients who would benefit from acupuncture treatments:

Those who have exhausted all treatment options used in traditional medical settings

Preventative treatment, balancing the person and getting them to a state of deqi

Downfalls of this treatment:

Difficulty finding a practitioner that has studied and gone through proper practical training in traditional acupuncture

Private practices, not associated with a medical entity

Acupuncture is not covered by insurance in many states.

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Abstract

Chronic pain is one of the most difficult conditions to treat. Close monitoring of controlled medications Unnecessary, expensive surgeries Alternatives to medication is increasingly necessary. Integrative medicine incorporates traditional western medicine with unconventional therapies, such as acupuncture. Evaluate the treatments’ efficacy for chronic neck and back pain by evaluating meta-analysis studies and randomized controlled trials.

Physiology is a large component of understanding how and if the acupuncture works. Non-invasive functional magnetic resonance imaging Neurotransmitters and their response to acupuncture Acupuncture therapy for improvement of chronic musculoskeletal pain

Research Question

In adult patients with chronic musculoskeletal pain, do therapies in integrative medicine such as traditional Chinese acupuncture improve pain compared to traditional western medicine?

Thank You