

# Acupuncture in the ED a Feasible, Beneficial Non-Opioid Option for Pain

Nancy A. Melville

Medscape Medical News © 2019

April 10, 2019

MILWAUKEE — Acupuncture administered in the emergency department (ED) is feasible and beneficial as a non-opioid, non-pharmacologic option for treating pain, new research suggests.

The feasibility and quality improvement study included more than 700 patients with acute pain who were approached in the Aurora West Allis ED in Milwaukee, Wisconsin, and offered an acupuncture intervention.

"We found that more than 50% of patients whom the physicians and acupuncturists agreed would benefit from acupuncture accepted it in the ED; and of those who accepted it, we saw pain reductions were up to 50% and stress and anxiety were reduced up to 60%," lead author John Burns, DPT, MPT, MSOM, Dipl-Ac, Department of Integrative Medicine, Aurora Health Center, Milwaukee, told *Medscape Medical News*.

"These are self-reported outcomes, but it's information that we want to take to potentially do more rigorous randomized controlled trials — putting acupuncture up against some of our traditional ways of treating pain, such as narcotics," he added.

Burns noted that the positive results occurred after just one administration of acupuncture in the ED, and patients were provided with information on where to receive follow-up treatments. "This is no different than when a patient receives medication during an ED visit," he added.

"The fact that they reported improvement from acupuncture is an understanding that patients can benefit from one acupuncture treatment similar to receiving medication but without the risk of adverse side effects," Burns said.

The findings were presented here at the American Pain Society (APS) 2019 meeting.

## Initial Skepticism

With pressure from the [Joint Commission](#) and other top organizations and agencies for hospitals to provide non-pharmacological methods for managing pain, acupuncture has gained acceptance in areas ranging from orthopedics to [cancer pain](#).

The current study was designed to align with the Joint Commission's recommendations, Burns said.

"We had to develop a competency for the acupuncturist to go through to get them up to par on what to expect in the ED," he explained. "We also did presentations to the ED physicians and staff to let them know what we were planning and get their buy in, which we did."

As expected, there were doubters at first, Burns said.

"There was initially great skepticism, and of course we should all have healthy skepticism for something that's new," he noted.

"My job was to educate them, give them an intro, explain to them the evidence that it has been studied in all types of patients. And after about a month, they were beginning to see benefits in their patients. So now there is acceptance."

For the current study, 706 patients with acute pain were offered acupuncture based on clinicians determining that the treatment would be appropriate for them. Among these patients, 379 (53.7%) consented to receive the treatment.

Patients considered most appropriate for the acupuncture intervention were those with an emergency severity index (ESI) score of 3 to 5, which is considered to be less severe pain than ESI scores of 1 or 2.

"More than 60% of patients who go to the ED are at about a 3 or higher, so that's who we found to be most accepting of this," Burns said. Patient conditions were wide-ranging, "from [back pain](#) to migraines, to even one patient with urinary retention," he noted.

#### Significant Pain Reduction

For the patients receiving acupuncture, mean pain scores significantly declined from 6.5 to 3.4 on a scale of 0 (signifying no pain) to 10 (signifying worst pain;  $P < .001$ ).

Significant decreases were also seen in mean levels of stress, anxiety, and nausea (all,  $P < .001$ ). Mean scores for anxiety decreased from 4.8 at baseline to 1.6; in nausea, the mean scores decreased from 1.6 to 0.6. There was also high acceptance of the approach among staff.

There were no significant differences between those who did and didn't receive acupuncture in terms of length of stay or medication/opioid use.

Under conventional treatment, patients presenting with pain to EDs typically receive prescription medications. Past research has suggested that as many as 17% of opioid-naïve patients who filled their first opioid prescription were still receiving opioids one year after the index ED visit, the current investigators write.

The cost for the acupuncture treatments in the study was covered by the hospital and was of no additional cost to the patients, Burns noted. He said he knew of no insurance companies that currently reimburse for acupuncture in the ED.

The program is ongoing and is currently in its third year at the center, Burns noted. Although the intervention is currently only offered in one center, the hospital system has five centers and "our hope is to brand it out [to] the other EDs," he said.

"We have had interest from others in our system in this," he added.

#### Provider Referrals Important

A separate, broader analysis of 1161 patients who used acupuncture in the Aurora Health Center system between 2005 and 2016 was also presented at the APS meeting — and underscored the importance of referral for acupuncture treatment.

Results showed that of the patients who were referred for the treatment, 87.7% were more likely to go to additional visits compared with 75.7% of their peers who were self-referred.

The patients who were referred also had more total visits than those who were self-referred (4 to 7 vs only 1 to 3, respectively).

"The results show that...referral patients are more likely to continue with those visits if they have the support of their doctor," lead author Carolita Heritage, MD, Department of Obstetrics and Gynecology at Aurora Sinai Medical Center, told *Medscape Medical News*.

The vast majority of the study population (n = 1057) were seen for pain, and more than 70% of the patients reported improvement in their pain following treatment with acupuncture.

Heritage noted the important caveat that insurance coverage of acupuncture is not consistent, and that cost can be an issue for many patients.

"Despite the greater acceptance of this, it's still hard to get coverage; but that's why we need more data to show that this is feasible and beneficial," she said.

#### "Don't Feel Discouraged"

Commenting on the findings for *Medscape Medical News*, pain medicine specialist Lucy Chen, MD, associate professor of [anesthesia](#) at Harvard Medical School, Boston, and a lead clinical investigator of the Mass General Center for Translational Pain Research at Massachusetts General Hospital (MGH), said that although the ED acupuncture study suggested improvements in pain with just one administration, most evidence shows that more treatments are needed.

"You really need to try for six or seven sessions before determining if acupuncture is successful or not. So it's important to recommend to the patient that they try that many," she explained.

"If the patient doesn't see results after one or two treatments, it's important to tell them not to feel discouraged," she added.

Chen, who was not involved with the current research, said that acupuncture is currently offered at her pain center and in various departments at MGH. However, she envisions a more

centralized, integrated health center to provide acupuncture and other non-pharmacological approaches to pain in all specialties.

"Acupuncture is scattered in different departments at Mass General. It's offered in the pain center, the cancer center, and other departments; but I'm thinking of developing an integrated center to play a more significant role," she said.

Chen agreed that clinicians shouldn't hold back on referring patients with pain to acupuncture, adding that research has shown that measurable reductions in pain have been observed in even the most skeptical of patients.

"It all comes down to the data — I like to promote scientific research. That is how to move this forward," she said.

*The study authors and Chen have disclosed no relevant financial relationships.*

American Pain Society Annual Meeting: Abstracts 361 and 362. Presented April 4-5, 2019.