

Acceptability and Clinical Outcomes of Acupuncture Provided in the Emergency Department

Adam Reinstein, MAOM, LAc

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Acupuncture in an Outpatient Clinic



- Spacious
- Relaxed
- Quiet Instrumental Music
- Softly Lit
- Pleasant Smelling
- Self-Pay or Insurance Covered

Acupuncture in the Emergency Department (ED)



- Cramped
- Stressful
- Loud Screaming and Beeping
- Brightly Lit
- Offensive Smelling
- No Cost to Patient (Research Supported)

Emergency Department Background

- Integrated one acupuncturist into a busy Emergency Department since November 2013 at the request of the ED Medical Director
- MD was looking for alternative treatments to avoid “narcotizing patients”
- Treated a wide variety of patients and conditions (pain, anxiety, nausea)
- Acupuncturist charted in the hospital’s electronic health record (EHR)
- 35 bed emergency department located at Abbott Northwestern Hospital, Minneapolis, MN
- Treat 45,000 patients per year
- Staffed by Physicians, Physician Assistants, Nurse Practitioners, Nurses, Emergency Medical Technicians, Pharmacists, and Social Worker



Acupuncture in Abbott Northwestern ED Pilot Study

- Conducted a retrospective chart review of patients that received acupuncture between November 2013 and December 2014
- During the study period (13 months), 436 pts were referred for AQ.
 - 73.3% (55/75) of clinicians referred for AQ.
- 279 pts approached by the acupuncturist during their ED visit.
 - Consent was obtained from 89% (248/279).



Acupuncture in Abbott Northwestern ED Pilot Study

- N=182 patients included in the final analysis
- Inclusion criteria:
 - Pain score > 0 before AQ
 - Pain score recorded after AQ
 - Age \geq 18 years old
 - Research flag = yes

Acupuncture Intervention

- Average acupuncture session lasted 23 minutes (SD = 8.9) and ranged from 6 to 78 minutes.
- Patients presented with pain in a variety of locations with the highest percentage (34.2%) experiencing discomfort in his or her back.
- The second most common location reported was the head (21.1%), which included headaches, migraines, facial, and throat pain.

Results: Acupuncture + Standard Care

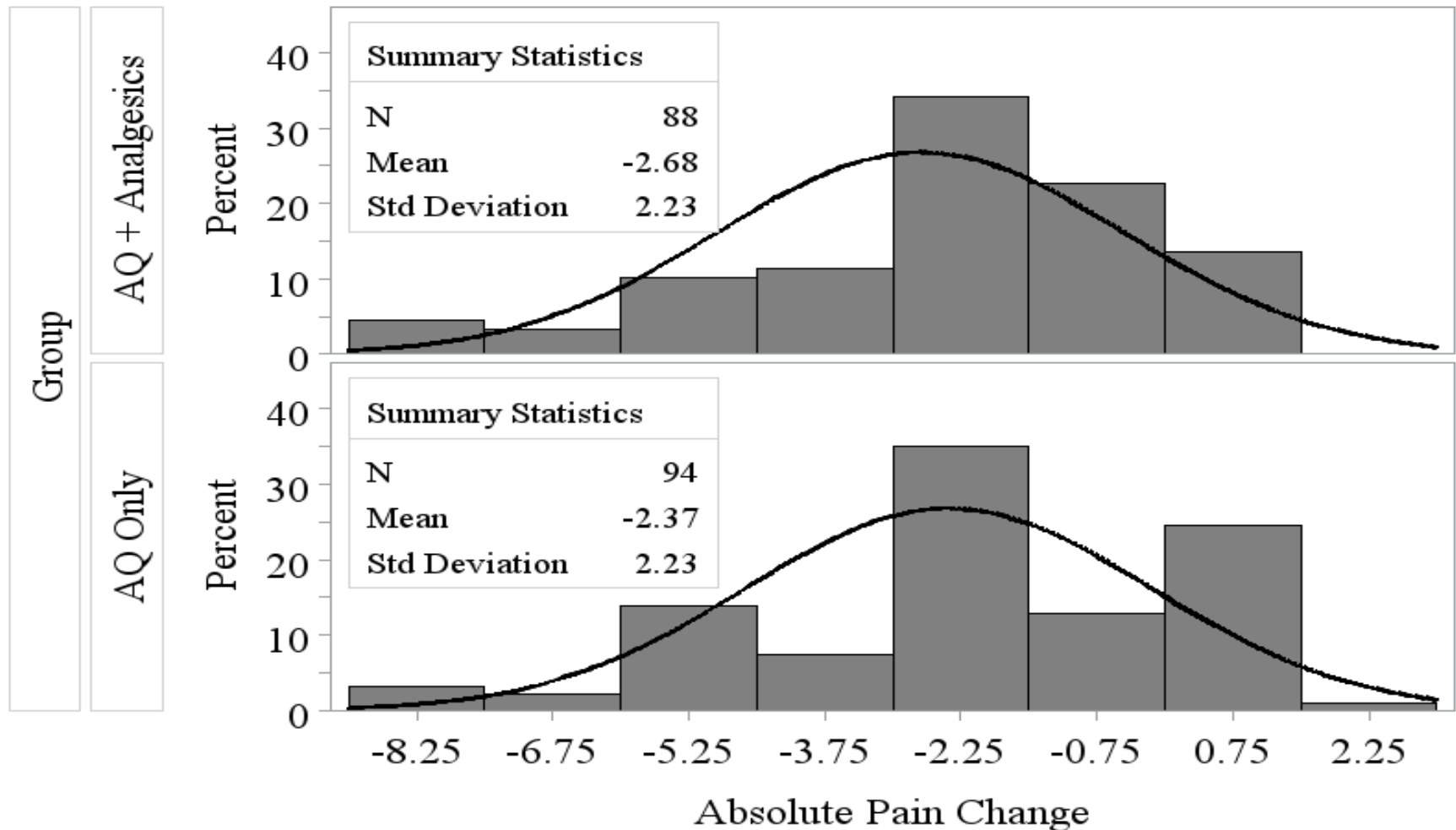
- Patients (n=182) had a mean pre-pain of 6.80 (SD = 2.58) and reported an average change of -2.52 (95% CI: -2.20, -2.85) with AQ + SC.
 - A decrease of more than 2 units in pain is clinically significant.
- Furthermore, 160 patients with high pain (pre-pain ≥ 4) had a mean pre-pain of 7.47 (SD = 1.93) and reported an average change of -2.71 (95% CI: -2.36, -3.07) with AQ + SC.

Results: AQ vs AQ + SC

- Half (94/182) did not receive analgesics before or during AQ .
 - Average change of -2.37 (95% CI -1.92, -2.83)
- Half (88/182) did receive analgesics + AQ
 - Average change of -2.68 (95% CI -2.21, -3.15)
- No significant difference between the reduction for AQ alone vs AQ + SC.

Absolute Pain change: AQ vs AQ+SC

Figure 1. Absolute Pain Change from Acupuncture, by Analgesic Use





Collaborators and Funding Sources

- Jeffery Dusek PhD, Principal Investigator
- Christopher Kapsner MD, ED Medical Director
- Jill Johnson PhD, Epidemiologist
- Michael Finch PhD, Methodologist
- Desiree Trebesch MA, Study Coordinator
- Rachael Rivard MA c, Biostatistician
- Lauren Erickson MA, Biostatistician

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Thank You