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Title

Results of the Acupuncture in the Emergency Department for Pain Management (ACUITY) Multi-Center Feasibility Study

Priority 1 (Research Category)

Pain management

Presenters

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Abstract

Context Pain accounts for a majority of emergency department (ED) visits and opioids remain a primary treatment. Acupuncture is a promising pain treatment. Objective To prepare for a future, definitive randomized control trial (RCT) of acupuncture vs usual care in EDs. Study Design and Analysis Multisite feasibility study to develop the manualized acupuncture intervention, refine recruitment and data collection, and assess implementation. Setting. EDs in Cleveland, San Diego, and Nashville, affiliated with BraveNet PBRN sites. Population Studied Patients presenting with acute non-emergent pain (e.g., musculoskeletal, back, pelvic, non-cardiac chest, abdominal, flank or head) of ≥4 on a 0-10-point Numeric Rating Scale (NRS). Intervention Patients randomized to usual care, or acupuncture (and extended pressure via ear seeds) provided by licensed acupuncturist using a consensus-based manualized protocol that standardizes the intervention while maintaining flexibility. Outcome Measures The primary objective is to assess feasibility, including recruitment and accrual rates, data completeness, participant retention, patient satisfaction at 1 week, and ED provider satisfaction. Treatment outcomes include pain and anxiety assessed on a 0-10 NRS pre-treatment, up to 60 minutes post-treatment, and at 1 week after ED visit. Results. Recruitment goals were met; 632 eligible patients were approached with 165 enrolled (26.1%) and randomized to Acupuncture (n=83) or Usual care (n=82). Participants were 57% female, 42% Black, 14% Latino and 55.1% publicly insured. Of enrollees, 152 (92.1%) and 128 (77.6%) provided post-treatment and 1-week pain and anxiety scores respectively. We saw no significant differences between arms in pain medications used in the ED or prescriptions provided at discharge. ED staff reported satisfaction with how the trial was implemented (75% satisfied or very satisfied). Baseline and immediate post treatment scores (sd) for pain were 7.4 (2.2) and 4.8 (2.8) in the Acupunture arm and 7.1 (2.3) and 6.4 (2.5) in Usual care arm; change in anxiety scores (sd) were 4.5 (3.4) to 2.4 (2.6) for Acupuncture arm and 4.1 (3.4) to 3.5 (3.2) for Usual care. Statistical tests are out of scope for this feasibility trial. Conclusions. Our findings suggest overall feasibility and acceptability of the study

procedures, and treatment change scores are promising for reductions in pain and anxiety. Refinements will inform a proposal for a UG3/UH3 definitive RCT.