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Acupuncture in the treatment of Painful Diabetic Neuropathy (PDN) – a pilot Randomized Controlled Trial (RCT)

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Title: Acupuncture in the treatment of Painful Diabetic Neuropathy (PDN) - A Pilot Randomized Controlled Trial (RCT)

Authors: Garrow AP^{1,2,3}, Vere J², Verrall B², Wang LF^{2,4}, Xing M^{1,2}, Jude E^{1,2,3}.

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Introduction: Painful Diabetic Neuropathy is a distressing and disabling complication of diabetes mellitus commonly associated with pain, sleep disturbance and poor quality of life. Current treatment is mainly pharmacological, which can be beneficial, but in many patients is ineffective or not tolerated and so patients can be left without any effective alternative treatment. In this single-blind placebo controlled RCT pilot study, we assessed the effectiveness, practicality and feasibility of acupuncture as an alternative treatment for PDN.

Patients and method: Fifty-one DM patients currently taking medication for PDN were recruited into the study. Patients with active foot ulcers, peripheral arterial disease and previous exposure to acupuncture were excluded. 23 (45%) were received active acupuncture and 28 (54%) sham acupuncture. The intervention consisted of 10 treatment sessions using pain measured on a 10cm visual analogue scale (VAS) as the principal outcome measure. Secondary outcomes included the Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) to assess changes in signs and symptoms, Sleep Problem Scale, and the Measure Yourself Medical Outcome Profile (MYMOP); all done at visits 0, 5 and 10. Resting blood pressure (BP) was taken at each visit.

Results: Of the 51 patients, 80% completed the final assessment. The drop-out rate was lower in the acupuncture group (14% vs 25% p=0.28). Participants in the active acupuncture group showed clinically important percentage improvements in all of the outcome measures: VAS (22% vs 18% p=0.49); Sleep (20% vs 6% p=0.43); MYMOP (19% vs 9% p=0.12) & LANSS (12% vs 3% p=0.34). Significant reductions were also observed in systolic BP (7% vs -0.3% p=0.03) but not diastolic BP (7.3% vs 2.2% p=0.18).

Conclusions: In this pilot RCT we have demonstrated the practicality and feasibility of introducing acupuncture into the everyday management of patients with PDN. Ongoing analysis of SF36 data and saliva cortisol levels will help to corroborate these results. Larger RCTs, however, will be needed to confirm the clinical and cost effectiveness of this intervention.

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Preference: Oral Presentation

Under 35 years of age

Over 35 years of age - **X**