

Randomised Controlled Trial comparing the Effectiveness of Electroacupuncture and TENS for Low Back Pain: A Preliminary Study for a Pragmatic Trial

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Objective: The objective of this study was to compare the effectiveness of electroacupuncture (EA) and transcutaneous electrical nerve stimulation (TENS) for low back pain (LBP) when the EA is applied in a clinically realistic manner.

Methods: The study was designed as an evaluator-blinded randomized controlled trial (RCT). The study was performed at the Tsukuba College of Technology Clinic in Japan. Twenty subjects, who suffered from LBP without sciatica, were recruited, using leaflets in Tsukuba city. Subjects were allocated to either an EA group (10 patients) or a TENS group (10 patients). The procedure for EA was in accordance with standard practice at our clinic. The main outcome measures were a pain relief scale (100mm visual analogue scale: VAS) and a LBP score recommended by the Japanese Orthopaedic Association (JOA Score).

Results: Mean VAS value during the 2- weeks experimental period of the EA group was significantly smaller than that of the TENS group (65mm vs 86mm; 95% CI, 4.126 - 37.953). JOA score in the EA group improved significantly while that in the TENS group showed no change.

Conclusion: Although some placebo effect may be included, EA appeared more useful than TENS in the short-term effect on low back pain. We suggest that more realistic acupuncture interventions based on standard practice should be employed in pragmatic RCTs