

## Roberta L. Ainsworth - Publications

### A prospective double blind placebo-controlled randomized trial of ultrasound in the physiotherapy treatment of shoulder pain.

Ainsworth, RL., Dziedzic K., Hiller L. Daniels J., Bruton A., and Broadfield J. (2007).  
*Rheumatology* 46 (5) 815-820

#### Abstract:

**Objective.** To compare the effectiveness of manual therapy and ultrasound (US) with manual therapy and placebo ultrasound (placebo US) in the treatment of new episodes of unilateral shoulder pain referred for physiotherapy.

**Methods.** In a multicentre, double blind, placebo-controlled randomized trial, participants were recruited with a clinical diagnosis of unilateral shoulder pain from nine primary care physiotherapy departments in Birmingham, UK. Recruitment took place from January 1999 to September 2001. Participants were 18 yrs old and above. Participants all received advice and home exercises and were randomized to additionally receive manual therapy plus US or manual therapy plus placebo US. The primary outcome measure was the Shoulder Disability Questionnaire (SDQ-UK). Outcomes were assessed at baseline, 2 weeks, 6 weeks and 6 months. Analysis was by intention to treat.

**Results.** A total of 221 participants (mean age 56 yrs) were recruited. 113 participants were randomized to US and 108 to placebo US. There was 76% follow up at 6 weeks and 71% at 6 months. The mean (95% CI) reduction in SDQ scores at 6 weeks was 17 points (13–26) for US and 13 points (9–17) for placebo US ( $P = 0.06$ ). There were no statistically significant differences at the 5% level in mean changes between groups at any of the time points.

**Conclusions.** The addition of US was not superior to placebo US when used as part of a package of physiotherapy in the short-term management of shoulder pain. This has important implications for physiotherapy practice.