

Therapeutic ultrasound for chronic low back pain (2014)

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COCHRANE BACK REVIEW GROUP
The best evidence in back and neck pain care

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Overview of the study

Objectives

- To determine the effectiveness of therapeutic ultrasound in the management of chronic non-specific LBP

Methods

- Evidence current up to 1 October 2013
- Participants: Adults with chronic non-specific LBP
- Intervention: Ultrasound therapy
- Outcomes measured:
 - Primary outcomes : symptoms, overall improvement or satisfaction with treatment, back-specific functional status, well-being, and disability
 - Secondary outcomes: lumbar range of motion, muscle strength and endurance

Results & Conclusion

- Seven trials (362 participants) included.

Treatment	Evidence	Quality of evidence
Therapeutic ultrasound	Improves back-specific function compared with placebo in the short term	Moderate
	No better than placebo for short-term pain improvement	Low
	Spinal manipulation reduces pain and functional disability better than ultrasound over the short to medium term	
	- No difference compared to electrical stimulation - Phonophoresis results in improved SF-36 scores compared to therapeutic ultrasound	Very low
Therapeutic ultrasound plus exercise	No better than exercise alone for short-term pain improvement or functional disability	Low

⇒ There is some evidence that therapeutic ultrasound has a small effect on improving low-back function in the short-term, but it is unlikely to be clinically important.