

Ultrasound ineffective for chronic low-back pain

Clinical question	How effective is therapeutic ultrasound (TUS) in the management of non-specific, chronic, low-back pain (LBP), ie, lasting longer than 12 weeks?
Bottom line	There was no high-quality evidence to support the use of TUS for improving pain or quality of life in patients with non-specific, chronic LBP. There was some evidence TUS had a small effect on improving low-back function in the short term, but this benefit was unlikely to be clinically important. Evidence from comparisons between other treatments and TUS for chronic LBP was indeterminate and generally of low quality. There was no information on the safety of TUS in terms of injuries or other harmful events.
Caveat	Most of the studies only provided short-term follow up (a few days to a few weeks). Not all recommended outcome measures for studies on LBP (eg, pain and back-specific function) were measured by all studies. Ultrasound application parameters and dose were inconsistently reported, which meant no conclusions on the most effective dose could be made.
Context	TUS is frequently used by physiotherapists in the treatment of LBP, using vibration to deliver heat and energy to muscles, ligaments, tendons and bones, with a goal of reducing pain and speeding healing.
Cochrane Systematic Review	Ebadi S et al. Therapeutic ultrasound for chronic low-back pain. Cochrane Reviews, 2014, Issue 3. Art. No.: CD009169.DOI: 10.1002/14651858. CD009169.pub2. This review contains 7 studies involving 362 participants
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[References]

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners. They are funded by the New Zealand Ministry of Health and are written by Prof. Brian McAvoy, Honorary/Adjunct Professor of General Practice at the Universities of Auckland, Melbourne, Monash and Queensland.

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