

- Ferreira ML ***Comparison of general exercise, motor control exercise and spinal manipulative therapy for chronic low back pain: A randomized trial.*** Pain. 2007 Sep;131(1-2):31-7. Epub 2007 Jan 23.
- Practice guidelines recommend various types of exercise and manipulative therapy for chronic back pain but there have been few head-to-head comparisons of these interventions. We conducted a randomized controlled trial to compare effects of general exercise, motor control exercise and manipulative therapy on function and perceived effect of intervention in patients with chronic back pain. Two hundred and forty adults with non-specific low back pain 3 months were allocated to groups that received 8 weeks of general exercise, motor control exercise or spinal manipulative therapy. General exercise included strengthening, stretching and aerobic exercises. Motor control exercise involved retraining specific trunk muscles using ultrasound feedback. Spinal manipulative therapy included joint mobilization and manipulation. Primary outcomes were patient-specific function (PSFS, 3-30) and global perceived effect (GPE, -5 to 5) at 8 weeks. These outcomes were also measured at 6 and 12 months. Follow-up was 93% at 8 weeks and 88% at 6 and 12 months. The motor control exercise group had slightly better outcomes than the general exercise group at 8 weeks (between-group difference: PSFS 2.9, 95% CI: 0.9-4.8; GPE 1.7, 95% CI: 0.9-2.4), as did the spinal manipulative therapy group (PSFS 2.3, 95% CI: 0.4-4.2; GPE 1.2, 95% CI: 0.4-2.0). The groups had similar outcomes at 6 and 12 months. Motor control exercise and spinal manipulative therapy produce slightly better short-term function and perceptions of effect than general exercise, but not better medium or long-term effects, in patients with chronic non-specific back pain.