Chronic Spinal Pain

A Randomized Clinical Trial Comparing Medication, Acupuncture, and Spinal Manipulation

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Abstract

Study Design.

A randomized controlled clinical trial was conducted.

Objective.

To compare medication, needle acupuncture, and spinal manipulation for managing chronic (>13 weeks duration) spinal pain because the value of medicinal and popular forms of alternative care for chronic spinal pain syndromes is uncertain.

Summary of Background Data.

Between February 1999 and October 2001, 115 patients without contraindication for the three treatment regimens were enrolled at the public hospital's multidisciplinary spinal pain unit.

Methods.

One of three separate intervention protocols was used: medication, needle acupuncture, or chiropractic spinal manipulation. Patients were assessed before treatment by a sports medical physician for exclusion criteria and by a research assistant using the Oswestry Back Pain Disability Index (Oswestry), the Neck Disability Index (NDI), the Short-Form-36 Health Survey questionnaire (SF-36), visual analog scales (VAS) of pain intensity and ranges of movement. These instruments were administered again at 2, 5, and 9 weeks after the beginning of treatment.

Results.

Randomization proved to be successful. The highest proportion of early (asymptomatic status) recovery was found for manipulation (27.3%), followed by acupuncture (9.4%) and medication (5%). Manipulation achieved the best overall results, with improvements of 50% ($P = 0.01$) on the Oswestry scale, 38% ($P = 0.08$) on the NDI, 47% ($P < 0.001$) on the SF-36, and 50% ($P < 0.01$) on the VAS for back pain, 38% ($P < 0.001$) for lumbar standing flexion, 20% ($P < 0.001$) for lumbar sitting flexion, 25% ($P = 0.1$) for cervical sitting flexion, and 18% ($P = 0.02$) for cervical sitting extension. However, on the VAS for neck pain, acupuncture showed a better result than manipulation (50%*vs* 42%).

Conclusions.

The consistency of the results provides, despite some discussed shortcomings of this study, evidence that in patients with chronic spinal pain, manipulation, if not contraindicated, results in greater short-term improvement than acupuncture or medication. However, the data do not strongly support the use of only manipulation, only acupuncture, or only nonsteroidal antiinflammatory drugs for the treatment of chronic spinal pain. The results from this exploratory study need confirmation from future larger studies.

Link to the full study:
https://journals.lww.com/spinejournal/Abstract/2003/07150/Chronic_Spinal_Pain__A_Randomized_Clinical_Trial.3.aspx