

Two-year follow-up of a randomized clinical trial of spinal manipulation and two types of exercise for patients with chronic neck pain.

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STUDY DESIGN: Randomized clinical trial. **OBJECTIVES:** To compare the effects of spinal manipulation combined with low-tech rehabilitative exercise, MedX rehabilitative exercise, or spinal manipulation alone in patient self-reported outcomes over a two-year follow-up period. **SUMMARY OF BACKGROUND DATA:** There have been few randomized clinical trials of spinal manipulation and rehabilitative exercise for patients with neck pain, and most have only reported short-term outcomes. **METHODS:** One hundred ninety-one patients with chronic neck pain were randomized to 11 weeks of one of the three treatments. Patient self-report questionnaires measuring pain, disability, general health status, improvement, satisfaction, and OTC medication use were collected after 5 and 11 weeks of treatment and 3, 6, 12, and 24 months after treatment. Data were analyzed taking into account all time points using repeated measures analyses. **RESULTS:** Ninety-three percent (178) of randomized patients completed the 11-week intervention phase, and 76% (145) provided data at all evaluation time points over the two-year follow-up period. A difference in patient-rated pain with no group-time interaction was observed in favor of the two exercise groups [$F(2,141) = 3.2$; $P = 0.04$]. There was also a group difference in satisfaction with care [$F(2,143) = 7.7$; $P = 0.001$], with spinal manipulation combined with low-tech rehabilitative exercise superior to MedX rehabilitative exercise ($P = 0.02$) and spinal manipulation alone ($P < 0.001$). No significant group differences were found for neck disability, general health status, improvement, and OTC medication use, although the trend over time was in favor of the two exercise groups. **CONCLUSION:** The results of this study demonstrate an advantage of spinal manipulation combined with low-tech rehabilitative exercise and MedX rehabilitative exercise versus spinal manipulation alone over two years and are similar in magnitude to those observed after one-year follow-up. These results suggest that treatments including supervised rehabilitative exercise should be considered for chronic neck pain sufferers. Further studies are needed to examine the cost effectiveness of these therapies and how spinal manipulation compares to no treatment or minimal intervention.