A RANDOMIZED CLINICAL TRIAL COMPARING FLEXION-DISTRACTION PROCEDURES WITH ACTIVE EXERCISE PROGRAM FOR CHRONIC LOW BACK PAIN

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Objectives

The objective of the study was to compare two well-defined treatment protocols: flexion-distraction (FD) and an active exercise program (ATEP) in treating low back pain patients.

Methods

Subjects, 18 years of age and older, with a primary complaint of low back pain (≥3 months) were randomly allocated to receive either FD or ATEP. The FD intervention consisted of the application of flexion and traction applied to specific regions in the low back, administered by chiropractors with the aid of a specially designed manipulation table. The ATEP intervention included stabilizing and flexibility exercises, the use of modalities, and cardiovascular training administered by physical therapists. A 100 mm visual analogue scale for perceived pain, the Roland Morris Questionnaire for low back function, and the SF-36 for overall health status served as primary outcome measures.

Results

A total of 235 subjects met the inclusion/exclusion criteria and signed the informed consent. Of these, 123 were randomly allocated to FD and 112 to the ATEP. Study patients perceived significantly less pain after intervention, regardless of which group they were allocated to ($p=0.00$). Subjects randomly allocated to the flexion-distraction group had significantly greater relief from pain than those allocated to the exercise program ($p=0.01$). Subgroup analysis indicated that subjects categorized as chronic, with moderate to severe symptoms improved most with the flexion-distraction protocol. Subjects categorized with recurrent pain and moderate to severe symptoms improved most with the exercise program.

Conclusions

Both groups achieved significant relief from pain, however flexion distraction provided more pain relief than active exercise. Chronic patients with moderate to severe symptoms improved most with FD. Patients with recurrent pain and moderate to severe symptoms improved most with ATEP.

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