



Australian Association of Musculoskeletal Medicine

A Comparison Between Two Physical Therapy Treatment Programs for Patients With Lumbar Spinal Stenosis: A Randomized Clinical Trial.

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Abstract:

Study Design. Multicenter randomized, controlled trial.

Objective. To compare two physical therapy programs for patients with lumbar spinal stenosis.

Summary of Background Data. Scant evidence exists regarding effectiveness of nonsurgical management programs for lumbar spinal stenosis.

Methods. Fifty-eight patients with lumbar spinal stenosis were randomized to one of two 6-week physical therapy programs. One program included manual physical therapy, body weight supported treadmill walking, and exercise (Manual Physical Therapy, Exercise, and Walking Group), while the other included lumbar flexion exercises, a treadmill walking program, and subtherapeutic ultrasound (Flexion Exercise and Walking Group). Perceived recovery was assessed with a global rating of change scale. Secondary outcomes included: Oswestry, a numerical pain rating scale, a measure of satisfaction, and a treadmill test. Testing occurred at baseline, 6 weeks, and 1 year. Perceived recovery, pain, and other healthcare resources used were collected with a long-term follow-up questionnaire.

Results. A greater proportion of patients in the manual physical therapy, exercise, and walking group reported recovery at 6 weeks compared with the flexion exercise and walking group ($P = 0.0015$), with a number needed to treat for perceived recovery of 2.6 (confidence interval, 1.8-7.8). At 1 year, 62% and 41% of the manual therapy, exercise, and walking group and the flexion exercise and walking group, respectively, still met the threshold for recovery. Improvements in disability, satisfaction, and treadmill walking tests favored the manual physical therapy, exercise, and walking group at all follow-up points.

Conclusions. Patients with lumbar spinal stenosis can benefit from physical therapy. Additional gains may be realized with the inclusion of manual physical therapy interventions, exercise, and a progressive body-weight supported treadmill walking program.