

Journal Review II

By Ron Feise, DC

Physical Therapists Fall Short

Freburger JK, Carey TS, Holmes GM. Effectiveness of physical therapy for the management of chronic spine disorders: a propensity score approach. *Phys Ther* 2006;86:381-94.

Synopsis: This was a retrospective assessment of physical therapy in the management of chronic spine disorders. The patients had spine problems lasting 3 months or longer (N=4,479). A matching (propensity score) approach was used to create a corresponding sample of participants who received physical therapy (intervention group) and participants who did not receive physical therapy (control group). This study examined physical therapy as a whole and did not assess the effectiveness of any one therapy.

Effect size for physical therapy*

PAIN: PT v. no PT .19

FUNCTION: PT v. no PT .16

* We performed statistical conversions of the data to facilitate interpretation with a statistic called "effect size" to document treatment effect (benefit). A positive effect size number favors the study treatment. Following is the benchmark for effect size: .2 equals a small treatment effect; .5 equals a medium treatment effect; and > .8 equals a large treatment effect.

Research Quality: This was not a high-quality study.

Conclusion: The differences in the amount of improvement between the intervention and the control groups were not clinically important.

Clinical Implications: The use of physical therapy under ordinary conditions failed to provide a clinically important benefit to the patients. Practitioners might want to avoid referring patients with chronic spinal conditions to a physical therapist. Note that the lead researcher was a physical therapist.

Management of Shoulder Capsulitis

Vermeulen HM, Rozing PM, Obermann WR, le Cassie S, Vliet Vleeland TP. Comparison of high-grade and low-grade mobilization techniques in the management of adhesive capsulitis of the shoulder: randomized controlled trial. *Phys Ther* 2006;86:355-68.

Synopsis: This study used a randomized controlled trial design. One hundred patients with unilateral adhesive capsulitis lasting 3 months or longer and a $\geq 50\%$ decrease in passive joint mobility entered the study. Patients were assigned randomly to a high-grade mobilization techniques group (treated with intensive passive mobilization techniques in end-range positions of the glenohumeral joint), or to a low-grade mobilization techniques group (treated with passive mobilization techniques within the pain-free zone).

The duration of treatment was a maximum of 12 weeks (24 sessions). An analysis with adjustments for baseline values was used to compare the change scores. The findings favored high-grade mobilization techniques by 9% (a patient has a 1 in 11 better chance of the treatment producing the desired outcome).

Research Quality: This was a high-quality study.

Conclusion: In subjects with adhesive capsulitis of the shoulder, high-grade mobilization techniques appear to be more effective for improving glenohumeral joint mobility and reducing disability. The overall difference between the two methods, however, was small.

Clinical Implications: Although low-grade mobilization techniques were not the most effective, a practitioner might consider them the preferred treatment for patients who are anxious about experiencing more discomfort during treatment. ■

These commentaries are excerpted reviews from Direction of the Evidence, published by the Institute of Evidence-Based Chiropractic, whose aim is the integration of science into chiropractic practice. Dr. Feise can be reached at rjf@chiroevidence.com.