

Identifying Patients Likely to Benefit from Spinal Mobilization

Physical therapists Flynn and colleagues¹ investigated the effects of a specific spinal mobilization technique in patients with low back pain. They identified a number of variables that were associated with a successful outcome after mobilization. Five variables formed a clinical prediction rule

1. 18-60 years old, primary symptom of acute (less than 16 days) low back pain with or without referral into lower extremity but not below knee,
2. Oswestry Disability Questionnaire score of less than or equal to 30%,
3. Score less than 19 on a fear avoidance questionnaire (FABQ),
4. At least one hypomobile vertebral segment,
5. At least one hip with more than 35 degrees of internal rotation.

Results:

- A patient who satisfies at least four of the five criteria will have a 92% probability of success if treated with spinal mobilization.
- A patient who satisfies fewer than three will have 7% probability of success if treated with spinal mobilization.

Childs et al² support the findings of Flynn et al.¹ and significantly increase clinician confidence in using the clinical prediction rule in decision making regarding the use of mobilization in the management of patients with low back pain.

References:

1. Flynn T, Fritz J, Whitman J, et al. A clinical prediction rule for classifying patients with low back pain who demonstrate short-term improvement with spinal manipulation. *Spine*. 2002;27:2835-2843
2. Childs JD, Fritz JM, Flynn TW, et al. A clinical prediction rule to identify patients likely to benefit from spinal manipulation: a validation study. *Ann Intern Med*. 2004;141:920-928.

Additional Reference For Manual Therapy As An Effective Treatment For Spinal Conditions:

Acure et al in *Spine* 2003 concluded: randomized, controlled trial, significantly greater improvement with the manual therapy group versus the exercise group in all outcome measures for chronic low back pain (>8weeks). Return to work 67% in the manual therapy group, and 27% in the exercise group throughout the 1 year follow-up.

Jull et al in *Spine* 2002 concluded: randomized, controlled trial significantly reduced cervicogenic headaches and neck pain with manipulation and exercise.

Anderson et al in N Engl J Med 1999 randomized, controlled trial concluded spinal manipulation more effective treatment for LBP than the standard medical care for patients with sub acute low back pain.

Schiller et al in J Manipulative Physiol Ther 2001 randomized, controlled trial concluded spinal manipulation was an effective treatment of mechanical thoracic pain.

Zylbergold in Arch Phys Med Rehabil 1981 demonstrated the manual therapy group improved pain reduction and lumbar mobility in comparison to traditional physical therapy treatments.

Jull, Bogduk in Med J Australia 1988 demonstrated accuracy of manual diagnosis for cervical zygapophysial joint pain syndromes when compared with radiologically-controlled diagnostic injections.

Blomberg et al, Scand J Prim Health Care 1992 demonstrated manual therapy six times less likely to be on sick leave at work versus conventional therapy and less costly.

Koes et al. J Manip Physiol Ther 1993 demonstrated reduction in severity of main complaint was superior with manual therapy than physical therapy for patients with LBP > 1 year.

Blomberg et al in Spine 1994 and Blomberg, Tibblin in Clin Rehabil 1993 demonstrated manual therapy concomitant with steroid injections were superior to conventional treatment alone.

Anderson et al. J Manip and Physiol Ther 1992. A meta-analysis of clinical trials of spinal manipulation.

Koes et al in British Med J 1991. Blinded review: Spinal manipulation and mobilization for back and neck pain.

Shekelle et al in Annals of Int Med 1992. Spinal manipulation for Low back pain.

Phillips, Twomey LT in Manual Therapy 1996. A Comparison of Manual Diagnosis with a Diagnosis established by a uni-level lumbar spinal block procedure.