

Low back pain (LBP) will affect between 60-80% of the population. Chronic LBP is disabling, costly, and well studied. Because recurrence of acute episodes may lead to chronic disabling LBP, we have devoted time and resources toward understanding the factors related to recurrence. Early intervention is the key to successful outcomes in treating low back pain. Abbott and Mercer<sup>1</sup> included 22 studies in their review on acute LBP in primary care, and concluded that although the belief that 80-90% of acute LBP will resolve in 6 weeks is widely perpetuated, there is considerable evidence that this is not the case. A review by Hestbaek et al<sup>2</sup>, also found no evidence to support the claim that 80%-90% of patients become pain-free within one month. They found, on average, that 62% of patients still experienced symptoms after 12 months and between 44% and 78% of subjects experienced relapses. ***The authors conclude by stating “the overall picture is that LBP does not resolve itself when ignored”.***

Physical therapy researchers studying the effects of manipulation on acute LBP have developed a clinical prediction rule to determine which patients will benefit from manipulation. Patients who had a successful outcome (defined as a 50% reduction in disability over a 2-4 day period) following manipulation were studied to determine what characteristics were present that would predict success. Five factors were retained in the predictive rule including:

- onset of <16 days and
- no pain radiating below the knee
- hip rotation greater than 35 degrees of either hip
- stiffness of any lumbar segments
- fear-avoidance score of >19 (FABQ work sub-scale)

Those patients with at least 4/5 positive findings on the rule had a 92% chance for a successful outcome.

Clearly recent research suggests that early physical therapy intervention is important for reducing pain, recurrence, and disability in patients with low back pain.



References:

1. Abbott H, Mercer SR. The Natural History of Acute Low Back Pain. *New Zealand Journal of Physiotherapy* 2002;30:8-17.
2. Hestbaek L, Leboeuf-Yde C, Manniche C. Low back pain: what is the long-term course? A review of studies of general patient populations. *Eur Spine J* 2003;12:149-65.
3. Hides JA, Richardson CA, Jull GA. Multifidus muscle recovery is not automatic after resolution of acute, first-episode low back pain. *Spine* 1996;21:2763-9.
4. 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;27:2835-43.
5. Childs JD, Fritz JM, Flynn TW et al. A clinical prediction rule to identify patients with low back pain most likely to benefit from spinal manipulation: a validation study. *Ann Intern Med* 2004;141:920-8