



Physical Therapy Update

The clinical staff at Frederick Sport and Spine Clinic regularly reviews articles, discusses the content and implements the information into our patient treatments. As a service to the local medical community, we are offering a summary of these articles to Physicians and Medical Practitioners. It is our intention to provide only the most pertinent info in these ½ page summaries. Further info is available at the clinic. Please take a moment to peruse the information below and contact us if you have any questions about the subject matter. Enjoy!

The role of repeated end-range pain response assessment in the management of symptomatic lumbar discs.

Wetzel F, Donelson R. The Spine Journal, 2003, Vol 3, p 146-154

The McKenzie Method of mechanical diagnosis and treatment (MDT) has continued to show validity and reliability in treatment of spinal conditions. Some physicians and other referring providers often send patients with spinal problems to any physical therapy clinic without considering the skills or the method of treatment provided by therapists at the clinic that their patient's are treated. This article by Wetzel and Donelson provided a literature review of available research performed using the McKenzie Method in the treatment of symptomatic lumbar discs. Some of the research examined included:

- 1) Patients with radiographic evidence of spondylolisthesis, retrolisthesis, or normal sagittal translation were randomized to an extension or flexion treatment strategy. Results revealed greater pain relief from the group treated with extension, supporting the hypothesis that the pain source was likely discogenic and not related to X-ray results.
- 2) A group of patients were instructed in the strict avoidance of positions and movements of lumbar flexion during the morning hours. At 1 and 3 year follow ups, pain-free days were significant and continued to increase in numbers.
- 3) The affect of sitting posture alone on LBP and sciatica was examined. Significant improvements in back and leg symptoms were evident in the group assigned to a lordotic sitting posture versus a kyphotic sitting posture. Patients in the lordotic posture group demonstrated rapid improvement in leg pain and centralization over a 48 hour period.
- 4) 145 patients with back and leg pain were examined with end range flexion and extension movements. 85% of patients improved with extension and worsened with flexion. The authors suggested that "a single structure with mechanically reversible characteristics may be responsible (the disc?)" for the pain.
- 5) 67 military personnel were hospitalized for possible surgical intervention d/t the severity of back and/or leg pain. All 67 patients were examined only with the extension in lying repeated movement. Those that did not worsen (N=35) during the test movements were instructed to perform very frequent amounts of extensions over the next 5 days. Of these 35 patients, 34 (97%!) recovered and avoided surgery, and 33 of them recovered within 5 days.

The literature review offers evidence that the McKenzie assessment techniques (MDT) provides insight into whether symptoms are discogenic, and if so, whether the annulus is intact. Using MDT, centralization of symptoms is a very high predictor that nonsurgical care will be successful. By contrast, if symptoms do not centralize using MDT, this is a predictor of a poor outcome with conservative care and the patient may be a good candidate for further medical intervention with injections and/or surgery. This has proven true for myself in the clinic at FSSC. I am very efficient with the McKenzie method of mechanical diagnosis and treatment. Patients who are unable to centralize symptoms with numerous different test movements (not just extension, which is a big misunderstanding with regards to McKenzie) do not have positive outcomes in therapy and are more appropriate candidates for continued medical management. Those patients who centralize progress very rapidly and do not require surgery. However, the fact remains that many therapists do not use the MDT to assess patients. It is using this method that these specific outcome predictors are available. I can provide this service for your patients and I can usually determine within 4-6 visits as to whether or not the patient will have a favorable outcome with conservative care. However, if a patient has not had a McKenzie assessment, the authors of this article suggest that the patient has not truly exhausted conservative care, as the McKenzie Method "provides information that is diagnostic, therapeutic and prognostic," (Wetzel et al 2003).

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