

The McKenzie Approach to Mechanical Spine Pain

DEFINITION:

In the McKenzie approach to mechanical spinal disorders, physical therapy evaluation and treatment are based on a thorough history and movement testing.

- A series of test movements and positions are applied in a controlled manner.
- Symptom behavior is observed before, during and after repeated movement testing.
- The movement/positions which decrease or abolish the symptoms are used as treatment and as the home exercise program, which also includes education in correct posture and body mechanics.
- If no movement or positions can be found to reduce, centralize or abolish the symptoms, then other treatment options will be investigated prior to referring back to the physician for further recommendations.

HOW IS IT DIFFERENT?

- Mechanical therapy is superior to traditional therapy, i.e., hot packs, ultrasound and massage, because it is a dynamic treatment approach which empowers the patient to self-treat vs. providing passive modalities.

- It provides education to the patient about what causes their pain, what activities they currently do which contribute to the pain, how to treat themselves and how to prevent future occurrences.

- It is cost effective in that a more efficient treatment can be provided using less treatment visits, without using costly modalities and while educating the patient how to self-treat and prevent future episodes.

- It provides an evaluation tool to determine if the patient's symptoms will benefit from mechanical therapy or if they should be referred for further testing.

WHY USE MECHANICAL THERAPY?

- Low-back pain tends to be self-limiting:

42 % of patients are better in one week

86 % of patients are better in one month

92 % of patients are better in two months

- While low back pain is self-limiting, it is also episodic, with recurrences becoming progressively more severe.

- Treatment must be provided while the patient is symptomatic and can learn which movements reduce and which movements produce symptoms.

- Goals of Mechanical Therapy:

Reduce pain and deformity

Maintain the reduction with education and posture

Recover function

Prevent future episodes

“ Centralization of pain was found to occur commonly in patients with low back and leg pain when mechanically evaluated in the manner described by McKenzie. **Those patients whose pain centralized had a high incidence of good or excellent treatment outcomes, whereas those whose pain did not centralize had much worse outcomes.**” *Donelson R, Silva G, Murphy K* “Centralization phenomenon. Its usefulness in evaluating and treating referred pain.” *Spine* 15(3) 211-213. 1990

“ **The Mckenzie assessment process reliably differentiated discogenic pain ($P < 0.001$) as well as competent from an incompetent annulus ($P < 0.042$) in symptomatic discs and was superior to MRI in distinguishing painful from nonpainful discs.**” *Donelson R, April C, Medcalf R, Grant W* “A prospective study of centralization of lumbar and referred pain. A predictor of symptomatic discs and annular competence.” *Spine* 22(10) 1115-22. 1997