



Surgery Compared to Rehabilitation Low Back Pain & Degenerative Disc

Phone: 860-763-2225
Fax: 860-763-3161

143 Hazard Avenue
Enfield, CT 06082

www.EnfieldHealth.com

*One-to-One Treatment Always
with a Licensed Professional*

Your Therapy Team

Katie Myers, DPT
Melissa Doten, MPT
Jennifer Meier, MPT, CLT
Jennifer Cavanaugh, PTA
Kevin Sadowski, BSN, DC,
Cert MDT

**3,000 square foot facility
with private treatment
rooms**

Providing Physical Therapy for:

Orthopedic Complaints
Post Surgical Rehab
Work Injuries
Auto Injuries
Back Pain
Neck Pain
Vertigo / Vestibular Rehab
Lymphedema
Headaches

Functional Capacity Evaluations

Specialty Certified In:

McKenzie Technique
Lymphedema Management
Vestibular Therapy
Gaston Technique
Mulligan Technique
Functional Capacity Evaluations

Payment

Accepting Medicare and most
major insurance. Letters of
protection accepted.

Previous studies have found rehabilitation programs to have efficacy roughly equal to lumbar fusion when chronic patients are randomized into treatment groups.¹⁻⁴ Hellum and colleagues recently attempted to compare the efficacy of a rehabilitation program to surgery with disc prosthesis.⁵ Their results were recently published by the *British Medical Journal*. Researchers randomized 173 patients into two treatment groups. The surgical intervention consisted of replacement of the degenerative intervertebral lumbar disc with an artificial disc - the ProDisc II Synthes Spine. Rehabilitation consisted of three to five weeks of physical workouts plus an emphasis on patient education (e.g. normal reactions to pain, coping strategies, family and social life, working conditions, physiology of the back, etc.). An interesting aspect of this study is that it only admitted patients who had already received physical therapy and or chiropractic care for *at least* six months without sufficient effect. Other studies have defined such patient groups as having “failed” conservative care. Participants all had low back pain for one year or more, an Oswestry disability index of 30 or greater, age 25-55, and disc degeneration.



The research group pre-defined a clinically significant difference as a treatment effect of 10 in the Oswestry disability index (where treatment effect was calculated as the difference between groups in mean change from baseline). **At two-year follow-up, the researchers found the difference between rehabilitation and disc prosthesis surgery not clinically significant.** The treatment effect was 8.4 in favor of surgery. On multiple secondary measures, the differences between the surgery and rehabilitation groups did not reach statistical significance: general health status, mental summary, fear-avoidance belief questionnaire, emotional distress, drug consumption, and return to work. However, we feel it important to note that while the results were often not statistically significant, data for disc prosthesis surgery trended better in all measures.

Christian Hellum, orthopedic surgeon from the Department of Orthopedics at Oslo University Hospital, concludes that **even with this patient group, it is reasonable to consider rehabilitation.** This group consisted of patients with chronic low back pain for more than a year, degenerative disc involvement, and having **already received physical therapy for six months or more.** The authors point out the much lower cost of rehabilitation, the recuperation time required by surgery, and the relative safety. Surgeries in this study had an 8% complication rate and a 6.5% reoperation rate. Negative sequela of surgery included a lower leg amputation secondary to compartment syndrome, retrograde ejaculation, sensory loss, and radicular pain.

We don't believe the authors would suggest doing the same physical therapy beyond six months despite a lack of results. It seems more to the point to say that rehabilitation in general has much to offer, and the lack of results from one protocol does not necessarily preclude the possibilities of other protocols available in physical therapy. In this study, 11 patients dropped out having received no treatment, and they had no changes at follow-up (a small, unintended control group). Compare this to the rehabilitation program which did achieve clinically significant gains in all measures including putting 23% of participants back to work. **When you see patients with serious, chronic back pain who have failed conservative treatment elsewhere, in addition to back surgery, please consider the highly effective physical therapy available to your patients at Enfield Health & Wellness Center.**

McKenzie Certified Care



Literally hundreds of peer-reviewed research papers now support the use of McKenzie Method. McKenzie Method is a therapy approach proven to produce faster, longer lasting, and less expensive results. This has been demonstrated repeatedly in journals such as *Spine*, the *Journal of Neurology*, *JMPT*, *Physiotherapy*, and the *New England Journal of Medicine*. McKenzie Certified care is one of the many therapy options available at Enfield Health & Wellness Center

REFERENCES

1. Brox JL, Sorensen R, Friis A, et al. Randomized clinical trial of lumbar instrumented fusion and cognitive intervention and exercises in patients with chronic low back pain and disc degeneration. *Spine*. 2003; 28: 1913-21.
2. Brox JL, Reikeras O, Nygaard O, et al. Lumbar instrumented fusion compared with cognitive intervention and exercises in patients with chronic back pain after previous surgery for disc herniation: a prospective randomized controlled study. *Pain*. 2006; 133: 145-55.
3. Fairbank J, Frost H, Wilson-MacDonald J, et al. Randomised controlled trial to compare surgical stabilisation of the lumbar spine with an intensive rehabilitation programme for patients with chronic low back pain: the MRC spine stabilisation trial. *BMJ*. 2005; 330: 1233.
4. Brox JL, Nygaard O, Holm I, Keller A, Four-year follow-up of surgical versus non-surgical therapy for chronic low back pain. *Ann Rheum Dis*. 2009; 69: 1643-8.
5. Hellum C, Johnsen L, Storheim K, et al. Surgery with disc prosthesis versus rehabilitation in patients with low back pain and degenerative disc: two year follow-up of randomised study. *BMJ*. 2011; 342d2786.