

Lower-back pain is the most expensive non-life-threatening ailment in America today. It is more likely to occur than a heart attack or cancer, yet it remains without a cure or a standard of care. Some experts have speculated that the combined medical and indemnity cost for treatment of lower-back pain is approaching \$61.2 billion annually in the United States alone.¹

Nonsurgical Disc Decompression

By Peter Ferraro, DC

**Intervertebral
Differential
Dynamics (IDD)
therapy is a treat-
ment for patients
with chronic
lower-back pain**

Life in a high-tech society finds most of us increasingly absorbed in technology, spending countless hours sitting in front of a computer or television screen. This manifests itself cumulatively and negatively in our body posture and body conditioning. The most endemic problem emerging from all of this is pain in the lumbar region of the back, a condition experienced by 80% of the public at some time in their lives.^{2,3}

The American Medical Association estimates that back injuries account for almost 20% of all injuries and illnesses in the workplace, and that more than half the money spent on lower-back pain goes toward surgical treatments. One new treatment seems to be emerging as a leading contender in this field.

Intervertebral Differential Dynamics (IDD) therapy is a nonsurgical system that provides treatment for patients with chronic lower-back pain. Developed by a team of neurosurgeons, orthopedic surgeons, and engineering experts, the IDD system of spinal decompression has evolved through several years of research and has been tested on thousands of patients with bulging, herniated, or degenerative discs.

Studies have shown that after only 4 weeks using the IDD therapy, patients have had a 50% reduction in the size and extent of a herniation based on the patient's pre- and post-magnetic resonance imaging.⁴ Approximately 86% of patients reported complete relief from back pain and accompanying sciatica or Posterior Facet Syndrome.⁵ The IDD program uses computers to track applied forces

and produces the ability to individualize treatment according to patient needs. IDD technology can quantify patient response to the treatment regimen, and pre- and post-individual therapy sessions, further improving results.

This is accomplished during a series of 20 to 25 ½-hour treatments. By using protocols developed by the Department of Neurosurgery and Radiology, Rio Grande Regional Hospital and Health Services Center at the University of Texas, precise angles are used to create negative intradiscal pressure. The importance of this is that nutrition in the avascular disc depends on diffusion of collagen precursors, nutrients, and oxygen through direct channels in the annulus and the hyaline end plate.⁶

By lowering the intradiscal pressure, the IDD system greatly facilitates this process and accelerates healing in the disc segment. Maximum clinical improvement occurs when treatment is delivered directly to the affected area. This technique of decompression with oscillation may prevent muscle spasm and patient guarding during treatment, as pressure within the disc is reduced from +25 mmHg to -150 mmHg.⁷ Decompression usually occurs at the therapeutic force of approximately one-half of the patient's body weight, plus or minus poundage as determined by the physician. This window of treatment is altered by factors such as small body frame, large body frame, or acute injury.

The patient is then fitted with the appropriate thoracic and pelvic harnesses specifically designed to accommodate his or her body type. The patient then steps onto a platform and is reclined into a supine position. A knee support is placed under both knees for patient comfort, keeping the knee in flexion. Once the patient is in the appropriate position, aligning the iliac crest with the split of the table, the lower harness is attached to the decompression unit. The chest harness is then securely attached to the table. A removable inclinometer attaches to the distraction belt of the decompression unit showing the angle at which the distraction force is being applied. Using the predetermined angles and the appropriate forces, spinal decompression is then initiated.⁸

This painless process decompresses the nerve roots and promotes healing. Over the past decade, patient comfort has improved dramatically, as well as the ability to focus therapeutic force on specific vertebral levels, and provide optimum relief. The therapy has been proven safe and effective in medical clinics.⁹ This particular system of nonsurgical decompression should not be confused with conventional spinal traction. Spinal traction cannot produce decompression that is unloading due to distraction and positioning of the intervertebral discs and facet joints.⁹ Decompression, therefore, is an event—a combination of restraint, angle position, forces necessary to unload, and equipment engineering.

Based on CN Shealy's review of recent study results, IDD appears to be the current optimal recommendation for most lumbar pain syndromes.¹⁰ Combining technological advancements with science, today's physician can offer patients with painful herniated and degenerative discs an effective alternative to surgery. ☐

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References

1. Griffin RM. The cost of pain. WebMDHealth. Available at:

<http://www.my.webmd.com/content/article/97/104602.htm>. Accessed July 12, 2005.

- Volinn E. The epidemiology of low back pain in the rest of the world. *Spine*. 1997; 22:1747-1754.
- Reuler JB. Low back pain. *West J Med*. 1985;142:259-265.
- Eyerman EL. MRI evidence of nonsurgical, mechanical reduction, rehydration and repair of the herniated lumbar disc. International Society of Neuroradiologists; October 1998; Orlando. Available at: http://www.slippeddisccenters.com/research/MRI/index_files/art_a2.jpg. Accessed July 12, 2005.
- Shealy CN, Leroy P. New concepts in back pain management: decompression reduction, and stabilization. In: Weiner R, ed. *Pain Management: A Practical Guide for Clinicians*. Boca Raton, Fla: St Lucie Press; 1998: 239-257.
- Ballard WT, Weinstein JN. Biochemistry of the Intervertebral Disc. In: Kirdaldy-Willis WH, Burton CV, eds. *Managing Low Back Pain*. New York: Churchill Livingstone; 1992: 39-48.
- Saal JA, Saal JS. Non operative treatment of herniated lumbar intervertebral disc and radiculopathy. An outcome study. *Spine*. 1989;14:431-437.
- Gionis TA, Groteke-DC, CCIC. Spinal decompression. *Orthopedic Technology Review*. 2003; vol 5-6.
- Cyriax JH. *Textbook of Orthopaedic Medicine: Diagnosis of Soft Tissue Lesions*. vol 1. 8th ed. London: Balliere Tindall; 1982.
- Shealy CN. Intervertebral differential dynamics therapy. *Practical Pain Management*. April 2005.

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