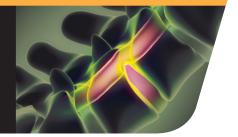


## **Spinal Decompression**

SAFE ALTERNATIVE TO SURGERY FOR LOW BACK AND NECK PAIN

### FDA-Cleared, Non-Invasive, Drug-Free Therapy

Spinal decompression is a non-surgical way to treat disc injuries in the back and neck by relieving pressure that is built up on the nerves and discs. For some, spinal decompression is a viable alternative to spinal surgery. It can also be effective for those who have had previous back surgeries.



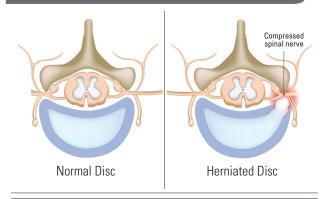
#### **How Does it Work?**

Spinal decompression therapy is delivered through cycles of distraction (gentle stretching) and partial relaxation while the patient relaxes on a special bed.

Decompression therapy gently separates the vertebrae from each other while creating a vacuum inside of the discs. This negative pressure can draw bulging and herniated disc material back into the spine and helps to increase disc height. It also re-nourishes discs by moving water, oxygen, and other nutrients into the discs, helping them to heal.

Drawing herniated discs back into place takes pressure off of the spinal discs and surrounding nerves to help relieve pain. Decompression also strengthens the ligament bands that hold disc material in place. This helps them heal and prevents future recurrence.

### SPINAL DISC HERNIATION



## MANY CONDITIONS BENEFIT FROM SPINAL DECOMPRESSION THERAPY

- · Low back pain
- · Bulging discs
- · Herniated discs
- · Head and neck pain
- Headaches, migraines
- · Pinched nerves

- · Radiating leg and arm pain
- · Sciatica
- Degenerated discs, degenerative disc disease
- · Facet Syndrome

### **What to Expect During Treatment**

Treatments are customized to individual needs and conditions. A single session lasts anywhere from 20 to 45 minutes, with multiple sessions occurring over 4 to 12 weeks. The feeling is best described as a gentle pull. Many patients find it to be very relaxing and some sleep during treatment.

Your doctor may recommend that you combine spinal decompression treatment with other therapies such as electrical stimulation, ultra sound, hot or cold therapy, or high intensity laser therapy.

Research Supports Spinal Decompression Therapy

# Research Supports Spinal Decompression Therapy

## Restoration of disc height through non-surgical spinal decompression is associated with decreased discongenic low back pain: a retrospective study.

C.C. Apfel, O.S. Cakmakkaya, W. Martin, C. Richmond, A. Macario, E. George, M. Schaefer, J.V. Pergolizzi. *BMC Musculoskeletal Disorders*. 2010; 11:155.

Discongenic low back pain is chronic pain due to disc degeneration. The goal of the study was to determine if changes in low back pain, measured before and after a 6-week treatment with non-surgical spinal decompression, correlate with the changes in lumbar disc height as measured on a CT scan.

The results showed that non-surgical spinal decompression was associated with a reduction in pain and an increase in disc height.

## MRI evidence of non-surgical, mechanical reduction, rehydration, and repair of the hernatied lumbar disc.

Edward L. Eyerman, MD. Journal of Neuroimaging. 1988; Vol. 8, No. 2.

The purpose of the study was to determine whether the clinical improvements seen in patients undergoing non-surgical spinal decompression correlated directly to improvements in MRI images.

Twenty patients were included in the study. All but three of them had significant pain relief and complete relief of weakness (when present) and immobility. Numbness in the leg disappeared in all but one patient who had far lateral disc herniation and in two with foraminal stenosis without much herniation. In those patients with disc herniation, 10 out of 14 had 90% improvement in pain and disability, two had roughly 50% relief, and one had only 20% relief. In those patients with foraminal syndrome (without much frank herniation of the disc), four had 75-100% improvement in pain, one had 50% relief, and one with severe spinal stenosis had little relief and was recommended for surgery. The degree of clinical improvement did roughly follow the changes seen in the MRI.

### Vertebral axial decompression on sensory nerve dysfunction in patients with low back pain and radiculopathy

Frank Tilaro, MD and Dennis Miskovich, MD. Canadian Journal of Clinical Medicine. January 1999.

The purpose of the clinical trial study was to determine if patients with radiating pain in the low back and legs (sciatica), also known as lumbosacral radicular symptoms, could get back to normal function in a cost-effective manner.

The results showed that after spinal decompression therapy, 91% demonstrated improved neurological function, and 86% resumed their normal daily activities. Overall improvement was 67%, with 64% of participants achieving complete recovery of neurologic function.

## A prospective randomized controlled study of VAX-D and TENS for the treatment of chronic low back pain.

Sherry E. Kitchener, P and Smart R. *Neurological Research*. October 2001; Vol. 23, No. 7.

This randomized controlled trial sought to determine the effectiveness and appropriateness of spinal decompression therapy. Patients received spinal decompression (VAX-D) or TENS treatment, which was used as a control or placebo treatment. Success was defined as a 50% reduction in pain and an improvement in the level of function.

The TENS treatment demonstrated 0% success rate while spinal decompression demonstrated a 68.4% success rate. A statistically significant reduction in pain and improvement in functional outcome was found in patients with chronic low back pain treated with spinal decompression.

