Options for Spine Treatments

Spinal Decompression Therapy

Spinal Decompression Therapy

Low back pain is a common problem which eventually affects about 80% of all adults in the United States during their lifetime. The back pain develops secondary to numerous different causes. The most common category of back pain is mechanical back pain, meaning the pain is caused or greatly influenced by physical pressure on pain sensitive tissues and/or abnormal physical movement of one or more areas of the spine. The most common cause of back pain is mechanical. Patients and physicans alike are always looking for new, cost efficient and safe methods to treat spinal conditions. Physical approaches to treating spinal conditions have become the standard rather than the exception. This includes chiropractic spinal manipulation, exercise therapy, custom bracing and spinal decompression therapy.

Decompression approaches have long been used treat spinal conditions. In the past the phrase was primary used to describe surgical procedures performed to remove tissue that was directly or indirectly causing to physical compression of another. Now the term is used in a more general fashion referring to procedures both invasive and non-invasive which are used to reduce pressure on one or more tissues of the spine. When the phrase is used to describe a non-invasive, non-surgical procedure requiring more than one treatment session it is often referred to spinal decompression therapy.

The use of spinal decompression therapy, has received considerable attention during the last few years. It is a non-surgical treatment for neck and back pain as well as related arm and leg pain. The primary goals of spinal decompression therapy are to reduce pain, restore spinal mobility, and to reduce pressure on spinal nerves. If a decompression approach increases the vertical distance between adjacent vertebrae it will contribute to increased dimensions of the opening on each side of the spine where the nerve roots travels. This may temporarily reduce pressure on a spinal nerve root.

There are many proposed benefits of spinal decompression therapy. The list of possible benefits include, reducing disc pressure, improving the movement of fluids and nutrients though the disc via diffusion, breaking up of restrictive adhesion (scar tissue), restoring spinal segment mobility, taking pressure off of spinal (facet) joints and improving blood flow to injured tissue.

Not everyone is a good candidate for a therapeutic trial of spinal decompression therapy. Conditions which have been reported as responding favorably to spinal decompression therapy includes; sciatica, disc herniation, disc protrusion, spinal stenosis, and radiculopathy.Spinal decompression therapy is economical compared to spinal surgery. Decompression therapy usually costs about 1-10% of the cost of low back surgery.

One of the goals of spinal decompression therapy is to take pressure off of the spine without triggering counter productive muscle spasm. This is usually attempted using high-tech tables. Some of the new tables are computerized systems that do not use harnesses, straps, belts, ropes, or pulleys. The use of safer and more efficient methods of decompression allows for a broader base of patients to quality as candidates.

Apart from use of tables, there are other ways of achieving spinal traction and decompression. One way is to use an FDA-approved spinal brace (orthosis) orthosis. Specialized braces have been designed to apply distractive forces along the spine. These are primarily used to treat the low back. These devices can be worn during the day in an attempt to provide gradual and controlled traction of the spine. Use of this type of brace may potentially reduce harmful loads translated through intervertebral discs and spinal joints during the normal day.

There are a variety of specialized traction and decompression tables on the market that were designed for physicans to use to treat back problems. Some of these tables have been approved by the United States Food and Drug Administration. Most of these tables were designed to provide gradual, physician controlled distraction along the length of the spine (spinal axis). The use of these specialized tables are proposed as a non-operative treatment option for the relief of low back pain associated with disc protrusion, disc herniation, degenerative disc disease, facet syndrome, or radiculopathy. The devices are engineered to apply persistent, intermittent, and dynamic cycling distraction forces to designated areas of the spine.

On some devices (tables) the patient wears a pelvic harness and is positioned on a table which restricts torso movement in some fashion. Some tables distract by each end of the table slowly moves in opposite directions. The distraction cycle is followed by a gradual decrease of tension. Several cycles of distraction and release of tension is performed. This method can provide stronger distraction forces than static methods. Each treatment session last an average of 20-30 minutes in duration. Each treatment session may consist of 3-20 decompression and relaxation cycles depending on the device and the protocol chosen. The number of sessions will vary depending on the technology used, the spinal condition treated and the response to decompression therapy. It is not uncommon for a treatment regain to include 10-20 sessions over 2-4 weeks.

The primary goal of spinal decompression therapy is to achieve decompression of the spine. Some research has revealed that decompression of the intervertebral discs reduces the pressure within the disc. Theoretically the reduction of intradiscal pressure promotes more efficient movement of fluids, nutrients and oxygen into the discs. This reduced disc pressure causes disc bulges and herniations to retract or become smaller in size, thus removing pressure on spinal nerve roots and on adjacent pain sensitive tissues of the spine. Spinal decompression therapy is a potentially effective method for treating and managing patients who have a symptomatic degenerative or bulging disc, as a first line of treatment or when other treatments have failed.