Flexion Distraction Treatment

Well-Researched Chiropractic Technique For Low Back Pain

Research Summary

Forwarded by: Dr. Mordy Levy, B.Sc., D.Ac., D.C.

10 Medically-Diagnosed-as-Needing-Surgery Cases Successfully Treated

Gallucci G [1438 S.O.M. Center Road, Mayfield Heights, OH 44124 -- (216)461-4848]: The effectiveness of chiropractic treatment for disc syndrome. *A study by Blue Cross and Blue Shield of Ohio and Physicians First, Inc.* (1996)

A study was conducted as a joint venture between Physicians First, an established chiropractic clinic, and Blue Cross and Blue Shield of Ohio. The purpose was to compile statistics on the effectiveness of chiropractic treatment of back injuries that might otherwise require surgical intervention. The study was composed of a total of 10 patients with diagnosed intervertebral disc syndrome. All 10 subjects had received treatment from a medical doctor for the diagnosed conditions. The subjects were treated under a twelve week plan which included the utilization of Cox Distraction Technique. Post-treatment surveys revealed that all 10 patients reported improvement in the frequency and severity of symptoms.

Flexion-Distraction Successfully Used to help Disc Herniation Patient

Guadagnino MR: Flexion-distraction manipulation of a patient with a proven disc herniation. J Of The Neuromusculoskeletal System 1997; 5(2):70-73

Lumbar radicular symptoms can be caused by lumbar intervertebral disc herniations. If a disc injury is positively established through diagnostic imaging, surgery is a commonly recommended approach. Flexion/distraction manipulation is a therapeutic alternative that may offer relief for subjective complaints and elimination of objective signs. Success with this technique might spare the patient an operative procedure. This is a case report of one such incidence.

Flexion/distraction manipulation is a treatment developed by James M. Cox. It is often used for lumbar disc injuries (herniation, bulges, etc.), and for other low back and lower extremity radicular conditions. The technique involves the use of a specialized table which allows for passive distraction, flexion, lateral bending, and rotation. These different planes of motion, along with the use of appropriate adjunctive therapy and exercises, allow for reduction of symptoms attributable to lumbar disc syndromes. Contraindications and indications for flexion/distraction manipulation have been identified and enumerated.

Flexion/distraction manipulation is a treatment that should be investigated as a part of the algorithm for presurgical therapies of lumbar intervertebral disc injuries. This alternative in conservative care may be of benefit to a large number of patients. The surgical option for treating intervertebral disc herniations might be reduced with propagation of flexion/distraction manipulation.

Cox® Flexion Distraction Relieves L4-L5 Disc Herniations

Bergmann TF, Jongeward BV: Manipulative therapy in lower back pain with leg pain and neurological deficit. J Of Manipulative And Physiological Therapeutics 1998; 21(4):288-294

Chiropractors need a nonsurgical, conservative approach to treat low back pain with sciatica as an alternative to and before beginning the more aggressive, and potentially hazardous, surgical treatment. There is some support for the idea that lumbar disc herniation with neurological deficit and radicular pain does not contraindicate the judicious used of manipulation. Although significant questions remain for the evaluation and treatment of lumbar radiculopathy (sciatica) with disc herniations) there is ample evidence to suggest that a course of conservative care, including spinal manipulation, should be completed before

surgical consult is considered.
Ice was applied to a patient's lower back for 5 minutes, followed by flexion-distraction mobilization done by placing a hand contact over the L4 spinous process and using the pelvic section of the table to distract the lumbar spine between the L4-L5 segment. This procedure was repeated three times with each distractive process held for 20 seconds. The patient was told to lie on her back at home with her knees bent in a "90/90" position whenever possible. She was instructed to get up only for bathroom use.
One week after this appointment, she reported that her lower back pain was almost gone and that the leg pain no longer bothered her. Treatment again consisted of lumbar flexion distraction and long axis distraction of the lower extremity. At this point, side posture rotary manipulation was added to her treatment plan.

Cox® FD used first in HNP

Hubka MJ, Taylor JAM, Schultz GD, Traina AD: Lumbar intervertebral disc herniation: chiropractic management using flexion, extension, and rotational manipulative therapy. Chiropractic Technique 1991; 3(1):5-12
The chiropractic management of a patient with a large herniation of the L5-S1 intervertebral disc is described. Manipulative therapy administered twice a day, over a 16-day period, consisted of flexion distraction mobilization, rotational manipulations, and extension mobilizations. Stretching, strengthening, and coordination exercises were performed in conjunctions with the manipulative therapy. Dramatic subjective and objective improvement followed chiropractic management. The criteria used to determine the type and direction of manipulative therapy, and the rationale for applying three different forms of manipulative therapy are discussed.

L5-S1 herniated disc reduced with flexion distraction care

Husbands DK, Pokras R: 1991 year-end compendium: The use of flexion-distraction in a lumbosacral posterior arch defect with a lumbosacral disc protrusion: a case study. ACA J of Chiropractic 1991; December, pgs 21-24
The authors present a case of a 24-year-old Hispanic hyperkyphotic male with a complaint of acute low back pain as the result of a bending and pulling injury. The patient presented with a marked right laterally flexed antalgic lean and appeared to be in severe pain. Radiographs revealed an L6 vertebra with hypoplastic lumbosacral articular facets and spina bifida occulta. The patient also had radicular compression symptomatology on physical exam. He was treated with flexion distraction for three treatments with a significant decrease in symptomatology. The significance of this case is that flexion distraction may also be useful in the treatment of conditions with inherent instability such as in the case presented.

L5-S1 Disc Herniation Successfully Care for With Distraction Manipulation

Cox JM, Hazen LJ, Mungovan M: Distraction manipulation reduction of an L5-S1 disk herniation. J of Manipulative and Physiological Therapeutics 16(5): 342-346
A computed tomography (CT)-confirmed L5-S1 disk protrusion is reported to be reduced following chiropractic adjustment, as seen on repeat CT scanning.
Distraction type chiropractic manipulation, electrical stimulation, exercises, nutrition advice and low back wellness school class were administered with complete relief of sciatic pain and nearly complete relief of low back pain.
Chiropractic distraction manipulation is an effective treatment of lumbar disk herniation, if the chiropractor is observant during its administration for patient tolerance to manipulation under distraction and any signs of neurological deficit demanding other types of care.

L5-S1 Disc Herniation Relieved by Flexion Distraction and Side Posture Adjusting

Crawford MC: Chiropractic management of acute low back pain. Alternative Th H 1999; 5(1):112

A 36-year-old mother of 2, previously healthy and athletic, presented with low back pain, sharp shooting pain down the side of her left leg, and a numb feeling in her toes. She stated

that she was unable to toe raise or straighten her left leg at the knee.
The CT scan indicated a central left disk herniation at the L5 to S1 level, which was abutting the ventral portion of the thecal sac and the left S1 nerve sheath.
Treatment involved 9 therapy sessions over a 3 week period. Each session consisted of 4 modalities. Interferential electrotherapy with moist heat lasting 15 minutes was used to control pain. The interferential was set at a low frequency, 1 to 15 Hz, with approximately 20 mA intensity (for patient tolerance) to produce endorphin release and relieve hypertonicity. Manipulation of the lumbar spine and sacroiliac joints was done with the patient in side posture. This manipulative technic was well tolerated and not painful during or after the procedure. Finally, flexion traction of the specific vertebral segments was accomplished using a Lloyd flexion distraction table, in which a manual traction force was applied to the L5 spinous process in a cephalad direction while the table was flexed, producing additional traction force at the specific vertebral segment. The patient improved with each session. After the 9th session, the patient felt she had improved enough to discontinue treatment.

Measuring Disc Herniations

Cox JM, Aspegren DD: A hypothesis introducing a new calculation for discal reduction: emphasis on stenotic factors and manipulative treatment. J Of Manipulative And Physiological Therapeutics 1987; 10(6):287-294
A literature review of the incidence and effects of manipulation on intervertebral disc protrusion is given. A case presented has a 14% reduction of the disc bulge following manipulative care with complete relief of sciatic and low back pain. A system to evaluate the size of disc herniation in computed tomography scans performed before and after manipulative treatment of disc protrusions is offered. Stenosis, with the critical compounded factors of vertebral canal size, dural sac cross-sectional area and soft tissue stenosis in protrusion of the ligamentum flavum and disc, as well as degenerative facet joint changes, is discussed to illustrate the complexity surrounding nerve root compression etiology. Understanding this integration of causative factors can help to explain low back symptoms and outline effective treatment plans.

Disc Cared for without Surgery

Cox JM: Lumbosacral disc protrusion: a case report. J of Manipulative And Physiological Therapeutics 1985; 8(4):261-266
A negative myelogram but a positive CT for an L5 disc protrusion is presented. Five months of medical care preceded chiropractic care; the insurance company involvement in a case where treatment mode is changed from usual orthodox medical procedures of epidural steroid injection and physical therapy to chiropractic distraction manipulation is detailed. Finally, the clinical outcome of the case is provided.
At the end of 6 weeks of care the patient returned to his full work duties as a truck driver. His range of motion of the thoracolumbar spine were full and normal and hi straight leg raises were positive right at 70 degrees and left at 60 degrees. He had taut hamstring muscle that required constant stretching so as to not mimic a positive straight leg raise sign. This case shows that time off work and cost were both reduced by chiropractic care.
Cox JM: Debate on the Disc: Abstract of Cox Distraction Adjustment Protocol for lumbar disc herniations. FCER Proceedings of the 1998 International Conference on Spinal Manipulation, July 16-19, 1998, Vancouver, BC, Canada: pgs 7-10