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The Tables Turn in Favor of Flexion-Distraktion

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by Jack Dolbin, DC, CSCS

Flexion-distraktion has stood the test of time and research as a therapeutic treatment for low back pain.



As a therapeutic treatment for low back pain, flexion-distraktion has certainly stood the test of time in the clinic and has received validation in the laboratory. Current estimates show that among the more than 38 different therapeutic techniques now practiced by chiropractors, flexion-distraktion is used by more than 58% of practicing DCs as a primary intervention for nonsurgical low back pain. Flexion-distraktion is also the most clinically defensible manipulative technique in terms of both patient outcomes and research. It is safe to say that no other manipulative technique has been as thoroughly investigated and validated by research as flexion-distraktion.

The History of Flexion-Distraktion

Flexion-distraktion has been used as a therapeutic technique for many decades. In fact, rudimentary forms of the technique have been discovered in writings dating back to early Greece.

The technique as we know it today has its modern roots in early osteopathy as a mobilizing traction manipulation and had one of its early proponents in Alan Stoddard, MD, DO, DPhysMed, who used it as a primary intervention in his book, *Manual of Osteopathic Medicine*, in which he credited John McManis, DO, with developing the procedure in the early 1900s.

Even more recently, James Cox, DC, has taken the technique into the laboratory, and with the efforts of researchers and chiropractic physicians has refined the procedure and validated scientifically the clinical outcomes observed over decades of administration. (See sidebar.)

A Well-Studied Therapy

An accurate and working diagnosis must be the foundation for any therapeutic intervention. Flexion-distraktion has demonstrated to be most effective in treating facet syndromes, nonsurgical disks, mechanical low back pain, sciatica, and spinal stenosis.

A recent study contrasting physical therapy and flexion-distraktion, conducted on a large patient sample at Palmer College of Chiropractic and National University of Health Sciences, showed similar initial results in the decrease of

pain and disability. However, 1-year follow-ups demonstrated statistically significant improvement in the flexion-distraktion group.

Hawk et al, in a study of 32 patients with subacute and chronic low back pain randomly assigned to various technique groups, demonstrated better clinical outcomes in the group using trigger-point therapy and flexion-distraktion than the other techniques, which included massage and a sham adjustment and trigger-point therapy, and a sham adjustment. Gudavalli et al demonstrated the superiority of flexion-distraktion over active exercise in patients with accompanying radiculopathy.

Two of the most impressive studies on flexion-distraktion to date involve the intradiscal pressure and neural responses to flexion-distraktion. Gudavalli MR and Cox JM et al, working on the hypothesis of Cyriax, Quillette, and Kramer, demonstrated reduced intradiscal pressure during vertebral axial decompression on three patients measured intraoperatively. A follow-up study by the same researchers demonstrated a "significant decrease in intradiscal pressure" using flexion-distraktion techniques. The same study showed increased intradiscal pressure with extension of the lumbar spine.

Celebrate Dr Cox

A fair expose on flexion-distraktion would not be complete without mention of the exhaustive work of James Cox, DC. Dr Cox has dedicated much of his professional life to the research and refinement of flexion-distraktion therapy.



I have had the opportunity to take a number of courses from Dr Cox on the application of flexion-distraktion as a primary intervention for the treatment of low back pain. His work is a credit to the chiropractic profession, and his seminars are a must for any practitioner who wants to practice the technique.

—JD

Bulbulian et al at New York Chiropractic College investigated the neural responses to flexion-distraktion therapy. H-wave response was measured during various ranges of motion in flexion performed on a flexion-distraktion table. The results showed a suppression of neuromuscular activation in flexion while no measurable changes were noted in lateral flexion.

Cox et al, in a study on a patient with a herniated disk with sciatica and using flexion-distraktion along with exercise, wellness school, nutrition advice, and electrical stimulation, demonstrated complete relief of sciatica; and a repeat computed tomography scan demonstrated a reduction in the herniation.

Snow et al showed improvement in the treatment of spinal stenosis and suggests the potential use of this technique in the treatment of this most difficult condition. It is most encouraging in light of the increased incidence of this condition as a consequence of an aging population and the fact that, according to Kirkaldy-Willis in his benchmark book, *Low Back Pain*, other manipulative techniques have an 18% success rate for central canal stenosis and 25% for lateral canal stenosis.

Although the majority of investigative work has been done in the area of the lumbar spine, initial research is most promising in the application of flexion-distraktion for cervical pain syndromes. I am sure that further investigation in this area is coming.

Proper Administration Is Key

The application of flexion-distraktion requires not only the proper equipment, but also knowledge of the technique. Like any therapeutic modality, there is potential for good and for harm. The indiscriminate or improper administration of the technique can not only fail to produce the proper results but can also increase symptomatology. Just purchasing a flexion-distraktion table without proper instruction will not equip the practitioner to successfully treat the aforementioned conditions.

Conversely, flexion-distraktion requires the proper treatment table. It is interesting to note that all major manufacturers now have some type of flexion-distraktion table in their product line. However, buyer beware: Not every table that claims to be flexion-distraktion is appropriate for the procedure. I suggest that you learn as much as you can about flexion-distraktion before purchasing the equipment.

Flexion-distraktion can be a valuable technique in the chiropractor's arsenal. The purpose of this article is not to disparage the different techniques in use by chiropractors today, nor to suggest we should all adopt flexion-distraktion as our primary therapeutic technique. Our medical counterparts do not all use the same surgical procedure for treating disk herniations. Because accurate diagnosis must precede any therapeutic approach, our patients should be moved into active care protocols as soon as symptoms allow, in order to gain maximum outcomes and long-term results.

The key to the efficacy of any therapeutic approach is simply patient outcomes. We cannot, however, disregard the importance of research in defending our individual treatment protocol, particularly with flexion-distraktion.

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Recommended Reading

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