Resolving Sciatica with Cox Flexion-Distraction Technique

By Dr. Jason Gray BHK DC MSc

Sciatica is a common neuro-musculoskeletal condition that results from irritation of the sciatic nerve. It is characterized by symptoms such as pain, burning, numbness, weakness, or 'pins-and-needles' into the hip, down the leg, and often into the foot. Sciatica can be a painful and debilitating condition, and is often slow to respond to traditional types of therapy.

Fortunately, Cox Flexion-Distraction Technique has emerged as one of the most effective, safest, and well researched therapies for treating Sciatica. In fact, Cox Technique can often provide dramatic relief when there are few other effective treatment options available. But before we talk about how Cox Technique works so effectively, it is helpful to first discuss what Sciatica is and how it develops in the first place.

Cox Technique can often provide dramatic relief for patients with Sciatica when there are few other effective treatment options available

The Sciatic Nerve

As the spinal cord descends within the spinal canal - a long opening that runs down the centre of the spine - it gives off small branches, or nerve roots, which exit through small holes on the side of the spine (these holes are known as intervertebral foramen). As the nerve roots exits the lower part of the spine they join together to form the larger sciatic nerve, which then extends from the spine to the posterior aspect of the hip, down the back of the thigh, and then into the lower leg and foot.

What Causes Sciatica?

Sciatica occurs as the sciatic nerve or any of it's beginning branches become compressed, pinched, or irritated. While it is possible for this to occur anywhere along the



Sciatic Nerve

As the nerve roots branch off of the spinal cord in the lumber spine they come together to form the Sciatic nerve. The Scitaic nerve then runs down the back of the leg, supplying the muscles, joints, and skin of the posterior thigh, lower leg, and foot. entire length of the nerve, the most common location for problems to develop is within the lumbar spine itself as a result of a disc bulge or disc herniation.

Disc Herniation.... The Most Commn Cause of Sciatica

The spine consists of a series of small, block-shaped bones stacked together to form a moveable column. Each of these bones - anatomically referred to as vertebrae - is separated by a soft, circular pad known as an intervertebral disc. This intervertebral disc is a critical component of the spine, which not only helps provide shock absorption, but is also the key structure that allows the spine to bend, twist, and move.



weak, or damaged, it will cause the disc to bulge backwards into the spinal canal or interverbral foramen – this condition is known as a disc bulge or 'herniation'. Not only can the disc herniation cause back pain (due to the injury and inflammation of the disc itself), but will also compress and irritate the nerve roots that form the sciatic nerve, which are located directly the intervertebral disc in the spinal canal and intervertebral foramen. As the nerve roots become inflamed and irritated it will create pain and/or other nuerological symptoms such as numbness, burning, pins-and-needles, or weakness into the leg along the path of the sciatic nerve. In some cases, a small tear can also develop in the outer aspect of the disc and some of the gel-like material normally contained in the middle of the disc can actually leak out of the disc (this is referred to as a non-contained disc herniation). This material will intensely irritate the nerves, creating more magnified sciatica symptoms.

Sciatic nerve

pain

CMMG 2005



Resolving Sciatica with Cox Flexion-Distraction

Fortunately, most cases of Sciatica respond well to conservative care and do not require surgery. However, it is important that sciatic symptoms are treated and monitored properly to both control pain and prevent any serious or long-term problems.

One of the most effective, safest, and well researched therapies for sciatic (particularly sciatic that results from problems in the spine such as disc herniations and spinal stenosis) is a treatment technique known as Cox Flexion-Distraction Technique.

Research studies reported that 80% of disc herniations in the cervical and lumbar spine were helped by flexion-distraction adjustment, with 63% of cases demonstrating a significant reduction in the size of the herniation on follow-up MRI imaging. -Journal of Manipulative and Physiological Therapeutics: 1996; 19(9)

Here's how Cox Technique works...

Cox Flexion-Distraction therapy is performed using a specially engineered treatment table that gently pulls and stretches the spine. With the patient lying face down on the table, the lower section of the table (the part of the table supporting the patients' legs) can be slowly pulled down and away. This motion lengthens the spine, which pulls the vertebrae away from each other and acts to "decompress" the damaged disc. As the spine stretches the doctor is able to focus the decompression at the level of the damaged disc by stabilizing the vertebra above the damaged disc using a specific hand contact. This focal pressure applied by the doctor makes Cox Technique more effective than traditional traction therapies or inversion devices which apply only a general



An example of Cox Treatment. Note how the doctor stabilizes the vertebrae while applying a decompression stretch using the specially engineered table.

traction, and do not provide feedback to doctor with respect to the health of the disc and spinal joints. Each decompression stretch is applied in a rhythmical push-pull action five or six times for a total of about 20 seconds. This process is usually repeated three to four times.

The decompression of the damaged disc achieved with Cox Flexion-Distraction has a number of important effects which help to reduce pain and promote healing of the damaged disc and spinal nerve. For example, this procedure has been shown to dramatically reduce pressure with the intervertebral disc which reduces strain and stimulates healing of the damaged discs. It also creates a vacuum effect within the disc. This acts to pull the herniated Nucleus back towards the centre of the disc, helping to reduce the size of the herniation and reduce pressure on the adjacent sciatic nerve roots (remember it is the bulging/herniated disc that is compressing the nerve root and creating the sciatica symptoms into the hip and leg.

Get Relief with Cox Technique

To book an appointment to see if Cox Flexion-Distraction will be able to help with your Sciatica call our office at (905) 685-7227. For more information on Cox Technique, Back Pain, or Sciatica, visit our website - www.GrayChiropractic.ca.



As the vertebrae are pulled apart during Cox Therapy it decompresses the disc. This acts to relieve pressure on the nerve and to facilitate healing of the damaged disc.



Gray Chiropractic Spine & Joint Clinic 40 Tulip Tree Common St Catharines ON L2S 3Y9 (905) 685-7227 www.GrayChiropractic.ca