Active Release Technique for the Treatment of Sciatica

By Dr. Brian Abelson DC.

In Chiropractic, it is generally believed that Sciatica is commonly caused by the compression of the nerve root at the Lumbar Disc or Foramen. This is certainly what I believed, and what I was treated for prior to my experiencing a L5/S1 prolapse into my own spinal canal. My experiences, since that time have caused me to change and adapt a new perspective.

Like most Chiropractors, I treated Sciatica with a variety of standard Chiropractic adjustments and achieved relatively good results. In most cases, our patients (after an extended period of care) got to a point where they experienced little or no pain as long as they received *regular maintenance care*. Unfortunately the need for ongoing maintenance care often indicates that the root cause has not been resolved.

In my own case, I demonstrated all the classic neurological signs of a prolapsed disc including severe Sciatic pain that felt like a continuous burning knife stabbing from my low back to the bottom of my foot. Nothing could relieve this pain, not Chiropractic adjustments, nor massage therapy, or stretching. I only received relief when I had a partial microdiscectomy of the L5/S1 vertebra.

After the operation I was able to return to my practice with minimal discomfort. Four to six weeks later I was essentially back to pre-injury status, but continued to have some low-back pain and ongoing Sciatica. I also continued to experience numbness in my leg and foot. These symptoms were managed through regular Chiropractic adjustments and exercise. But it became obvious to me that neither the surgery, nor the Chiropractic treatments were effective in identifying or treating the root cause of the problem.

About ART

About one year after my operation, I started to train in, and to practice the Active Release Technique (ART). Dr. Mike Leahy developed this remarkably effective technique for the treatment of soft tissue injuries. Dr. Leahy is a Doctor of Chiropractic who was also trained as an aeronautical engineer.

ART's effectiveness in the treatment of soft tissue injuries has been well documented, and is much sought after by people in all walks of life. During one of my ART training courses, Dr. Leahy examined me and found several adhesions in my hip rotators and hamstrings which were impinging on my Sciatic nerve. When

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he applied ART to these areas, I felt as if I had just blown my disc again. I felt the original pain pattern down my leg, severe leg cramping, and the stabbing knife-like pain down my back and leg. I found myself wondering "What the hell is he doing to me". The last thing I wanted was to be back in a hospital.

However, when I got up from the table, I was surprised to see how much looser and stronger my leg felt. Two subsequent ART treatments found me completely without low back or Sciatic pain. Additionally, the ongoing numbness in my leg was also gone. Neither the pain nor the numbness has returned over the last few years. Not even the stresses of marathon and triathlon training has caused any regression.

This experience made me ask some important questions:

- What was the cause real cause of my Sciatic pain?
- Was the prolapsed disc the primary cause of the problem or a secondary result of peripheral nerve entrapment?
- How effectively was I treating patients with similar Sciatic pain in my own practice?

Consider peripheral nerve entrapment to be the primary cause.

Active Release Technique has revealed that Sciatica is more often caused by *peripheral* nerve entrapments rather than by nerve route entrapments at the Foramen and Disc.

Significant improvement or resolution in Sciatica cases, within only two or three patient visits, is not uncommon when ART is used to free up the peripheral entrapment sites. In fact, for many of our previous patients that had been diagnosed with disc problems, we have seen complete resolution of all symptoms. Some of the common sites for peripheral entrapment of the Sciatic nerve can be found:

- Between the hamstrings.
- Attached to the Adductor Magnus and hamstrings muscles.
- Attached to the Superior Gammelus muscle as the Sciatic nerve passes over this muscle.
- Attached to the Piriformis muscle as the Sciatic Nerve passes under or through the Piriformis muscle.

Applying the Active Release Technique

Your patient's symptom and pain pattern can provide clues as to which structures are causing an entrapment syndrome. But these evaluations cannot be confirmed until you use a hands-on technique like ART to feel and identify the adhesion and entrapments. With ART, you use your sense of touch, like a second type of vision, to identify and release entrapments.

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During the ART procedure you are often formulating your diagnosis and performing your treatment at the same time. You must consider tissue texture, tissue tension, tissue movement, and tissue function. Each of these factors can cause you to greatly alter your treatment. ART, like Chiropractic, is both an ART (no pun intended) and a science.

For example, take the case of a Sciatic nerve that is entrapped between the hamstrings. In such cases, the patient's symptoms are often exacerbated during hip flexion with extension of the knee and dorsiflexion of the ankle. You can also feel the lack of motion in areas that are entrapped, by the lack of tissue translation.

Once you have identified the specific entrapment site, and have the lesion under a specific contact, you must take the tissue from a shortened to a fully elongated position, while moving longitudinally along the soft tissue fibers.

During the ART treatment, the hamstring is moved by the doctor in a proximal direction that follows the direction of the tissue fibers. At the same time the patient is asked to execute a movement that causes the Sciatic nerve to move distally. When this happens, you can literally feel the nerve translate in one direction while the muscles move in the other as the nerve restriction is freed up.

Dr. Abelson demonstrates a common procedure used to free up the Sciatic nerve when it is trapped between the hamstrings.

Note: The hamstrings are only one of numerous peripheral entrapment sites that are commonly found along the route of the Sciatic Nerve.

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Conclusion:

Perform a complete neurological and orthopedic examination and obtain a full case history for your patients. Make sure you rule out any red flags. Then consider what may be the most common cause of Sciatica. Most cases of Sciatic nerve entrapment occur distal to both the Disc and the Foramen. In fact, many disc problems may be a secondary effect of peripheral nerve entrapments.

In most cases, Chiropractors can effectively treat Sciatica by using the ART technique to release peripheral nerve entrapments This treatment usually takes a very limited number of visits, and it is not uncommon to have complete resolution of the problem without the need for ongoing maintenance care. We have found this to be true in over 90% of our patients who suffer from Sciatica. This success rate has substantially increased our patient referral rate.

ART cannot be learnt from a book, it takes time and repetition to hone and perfect the required skills, but it is well worth the time and effort. The results for you and your patients are substantial and usually immediate. Once a practitioner takes an ART course, it usually takes about two years before they become completely proficient in its techniques. .

I highly recommend taking all the ART courses offered by Dr. Leahy. Alternatively consider referring your chronic Sciatica patients to a practitioner who is certified in the Lower Extremity ART Protocols. (You can find a listing of certified practitioners and courses available at www.activerelease.com).

References:

1. Active Release Techniques – Lower extremity and Spine Manuals, Dr. Michael Leahy.

Dr. Brian Abelson is Edgemont Chiropractic's clinical director. Dr. Abelson is a native Calgarian who graduated from Palmer College of Chiropractic West in 1992 with an award for clinical excellence, and holds a Level 3 Active Release Certification.

Dr. Abelson regularly teaches courses in nutrition and alternative and complementary medicine for the Calgary Board of Education, Massage Schools, various health organizations, and to other health care practitioners. Dr. Abelson is the host of the award winning, popular web site "Ask Dr. Abelson" at www.drabelson.com.

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