



# Diagnosis and Treatment of an Adherent Nerve Root



McKenzie Series – Brought to you by Capital Physical Therapy

This newsletter is a continuation of our “**McKenzie Series**”. We recommend that you visit our website [www.capitalpt.com](http://www.capitalpt.com) to view our previously released McKenzie newsletters prior to reading this edition.

What is an adherent nerve root?

Taken from our online dictionary (I love technology!), adhere means to “stick firmly to a surface or an object”. Nerve roots are the portion of the nerve that exit from the spinal cord in the small holes (foramen) on either side of the spine. Think of them as the major branches of a tree (the spinal cord is the trunk) from which multiple other branches will sprout. Nerve roots exiting from the neck (cervical spine) provide us sensation and motor control of the upper limbs. The roots exiting from the lower back (lumbar) and tail bone (sacral) regions of the spine provide us sensation and motor control of the lower limbs.

Let’s assume that we have an adherent nerve root (ANR) in the lumbar spine. This means that one or more nerve roots in this region of the spine are “stuck” on something and this can cause pain, numbness, tingling, strength loss etc. on the affected side. If there is an adherence on the left side of the lumbar spine, symptoms can present at the left lower back, left buttocks and especially at the left lower extremity. Adherent nerve roots can also occur in the neck.

How is an adherent nerve root diagnosed?

Therapists trained by the McKenzie Institute are trained to sift through clues provided in patients’ histories and also to identify specific signs and symptoms

associated with this diagnosis. A thorough mechanical exam by a trained McKenzie therapist can identify a nerve root adherence.

Why and how does it happen?

In most cases of ANR, nerve roots will stick to a previously formed scar. This is often the case when a fibrous repair is made following a disc herniation or protrusion. In cases such as this, the nerve root will adhere to the disc wall which will limit the mobility of the nerve root. So, what happens when the nerve root is stretched beyond its limit? You guessed it.....pain in the affected limb.

If you are familiar with our ***Classifications of Mechanical Back and Neck Pain*** newsletter, you will remember the dysfunction classification. We used the bent elbow example to explain this condition. “If you fracture your elbow and are placed in a cast with the elbow bent you will lose your ability to fully straighten the elbow upon having the cast removed several weeks later.” A similar situation arises in cases of nerve root adherences. The nerve root has essentially lost its flexibility because it is stuck on some other structure. The major difference is that, in cases of dysfunction, symptoms are felt at the site of the dysfunction (back or neck only) and are not referred into the arm or leg as is the case with ANRs.

Many people think that the only explanation of sciatic symptoms in the leg

can be due to a derangement (disc bulge), disc herniation or nerve pinching by muscle in the hip or buttocks. In the case of an ANR, none of these scenarios exist. Typically, the nerve root adheres to another structure because it was never mobilized or allowed to move effectively as a prior injury was healing or, in other cases, it simply is a “use it or lose it” scenario where the nerve root has been allowed to adhere because it hasn’t been mobilized enough. Nerves have to have a certain amount of flexibility in order for us effectively move our limbs. Beware; those of you who complain of chronic tight hamstrings and experience pain with stretching.....you may have a nerve root adherence!

What should I do if I think I have an adherent nerve root?

I recommend that you see a therapist trained in mechanical diagnosis and therapy of the spine. I am a certified in Mechanical Diagnosis and Therapy by the McKenzie Institute and am ready and willing to help you solve your problem. I will work with your physician to help you recover as soon as possible. Most insurance companies require a doctor’s prescription for physical therapy prior to your initial consultation. So.....what are you waiting for????? Stop “popping” those pills and let’s try to solve the problem!

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Stay tuned for more newsletters in the future. Please visit our website to learn more about Capital Physical Therapy. Information contained in this newsletter is based on teachings of the McKenzie Institute. To learn more, visit them on the web: **[www.McKenzieMDT.org](http://www.McKenzieMDT.org)**  
Thanks for reading!

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***“The Road to Recovery Begins Here”***