## TWO CONTRASTING CASES OF SCIATIC RADICULOPATHY: ONE WITH NORMAL MRI AND ONE WITH A FREE FRAGMENT. WHAT'S A CHIROPRACTOR TO DO?

A 26-year-old, white, married, female is seen for the chief complaint of low back pain radiating into the right lower extremity with occasional numbness of the foot and toes, none specific. She states that this pain is deep in the right thigh, and started following a fall 6 years previously. Her pain varies from a VAS of 4 to 8 but in the last two years has been worsening and is constant. Sitting, bending, lifting, and twisting movements at the waist aggravate the pain. She has tried to use Yoga, heat, and did visit one Chiropractor a year ago for two to three visits which did not help her.

Her vital signs are normal. The deep tendon reflexes of the patella and ankle are plus 2. Sitting straight leg raise produces both low back and right leg pain. The supine straight leg raise produces pain on the right lower extremity in the first sacral dermatome at 40 degrees with a very positive Braggard sign. Lindner sign is positive for low back and right leg pain. Pinwheel examination reveals hyperesthesia of the right S1 dermatome and pain on palpation is marked from the L4 to S1 levels on the right side. No motor weakness is noted.

Due to the long-standing pain without relief, the decision was made to have an MRI done to define disc herniation or stenosis. It is shown in Figures 1, 2, and 3 (Case #1). You can see that it is a very normal MRI.

We are confronted, therefore, with a normal MRI and a significant S1 dermatome right lower extremity sciatica.

Clinically, the decision was made to treat this lower extremity pain as scleratogenous pain in origin. The patient was started with Protocol I Cox<sup>®</sup> flexion-distraction and decompression of the L5-S1 disc space followed by positive galvanism to the L5 disc even though no disc herniation was present on MRI. This was followed by tetanizing current to the paravertebral muscles and right gluteal and posterior hip muscle groups. Very specific and accurate tolerance testing was performed as was patient tolerance throughout the manipulation application.

The result of this treatment was marked pain relief with one visit, and the patient continued on with progressive relief. The fourth visit showed the VAS-reported pain reduced to 2 at the worst.

The reason I present this case is that we see a negative MRI with full blown sciatic pain and positive tests for same. We did have a successful treatment outcome. If it had not been successful, we could have used epidural steroid injection, with full awareness of its limitation, or perhaps discography to further identify any disc leak causing chemical radiculitis-generated sciatic radiculopathy.

Now contrast this case with Figures 4 & 5 (Case #2) which is a free fragment of disc which produces sciatic pain as well. Here we can appreciate the chemical radiculitis of the free fragment as the probable origin of the sciatica. This patient also is relieved of her sciatica using Protocol I Cox<sup>®</sup> flexion-distraction and decompression adjusting.

This case report is to show contrasting findings - sciatica with a negative MRI and sciatica due to a free fragment visible on MRI. Treatment is different in that the case with the negative MRI received Protocol I adjusting instead of Protocol II following careful tolerance testing even though the MRI was negative for disc herniation or stenosis, and the free fragment visible on MRI patient received Protocol I flexion distraction decompression treatment. I chose to start with Protocol I with the negative MRI sciatica patient before introducing Protocol II treatment so as to avoid any iatrogenic pain for the patient. By the third visit, we introduced Protocol II care because of over 50% relief of the sciatic pain and avoided the possibility of introducing pain by introducing Protocol II too soon. These cases point out the extreme need for careful diagnostic work up and correlation with diagnostic imaging to arrive at the proper treatment course. No doubt many of you have been confronted with similar situations. Any comments?



Figure 1 – Case #1 (below): Normal MRI axial view of the L4-L5 disc space

Figure 2 – Case #1 (below): Normal MRI axial view of the L5-S1 disc space







Figure 4 – Case #2 (below): Note the large free fragment lying within the vertebral canal



Figure 5 – Case #2 (below) – axial cut of free fragment



Respectfully submitted, James M. Cox, D.C., D.A.C.B.R. 3/11/08 Published to website 4/8/08 – Case #59 www.coxtechnic.com/casereports.asp

