Large Extraforaminal L2-L3 Disc Herniation Treated Successfully with Cox® Technic Protocols:

Always Treat Above the Disc Herniation

This 59 year old white, healthy, male is seen for the chief complaints of severe right anterior thigh pain, measured on a VAS scale at a 10, and low back pain at a 5. The pain started following going shopping all day. The pain was so severe that he went to the emergency room of a hospital and was given a dose pack of Prednisolone and Darvocet. When seen the next day in our clinic, examination showed that he walked with a very marked antalgia, flexed forward at the waist, with severe pain down the right anterior thigh. The straight leg raise was negative, which is expected in upper lumbar disc herniations, and the sitting straight leg raise was also negative. He could toe and heel walk normally. The sensation to pinwheel was normal on the thigh.

Treatment was first instituted consisting of holding the right ankle and maintaining a constant decompression at the L2 lumbar spine level. Treatment with Cox decompression adjusting at the L2-3 disc level was continued daily with positive galvanic current to the L2-3 disc level and the anterior thigh in the distribution of the femoral nerve. Also the obturator nerve innervating the adductor muscles was extremely painful and trigger point treatment to them was administered. At home he applied ice to the back, but ice aggravated his leg pain and was discontinued. The patient and his wife massaged warm lotion into the right anterior thigh.

This patient was also seeing his medical doctor who ordered a MRI of the lumbar spine on day 10 of his treatment. The medical doctor also told the patient that we could not help him.

Figure 1: Large right far lateral disc herniation at the L2-L3 level which is causing severe right anterior thigh pain. Note the L2-L3 far lateral extraforaminal disc prolapse that occludes the osseeoligamentous canal and compresses the exiting L2 dorsal root ganglion to cause the right femoral and obturator radiculopathy.
Figure 2: Stenosis at the left L4-L5 level due to endplate hypertrophy and probable disc herniation into the osseoligamentous canal. The right osseoligamentous canal also is stenotic. Note also the left, side opposite the right femoral nerve radiculopathy, L4-L5 osseoligamentous canal disc herniation that causes no radicular component at this time. The L4 dorsal root ganglion is compressed severely.

Figure 3: Note the central disc bulge, but the neural complex is not compromised at the L5-S1 level. Further, note the central L5-S1 disc protrusion and left foraminal stenosis due to disc bulging and endplate hypertrophy.

The MRI study shown in figures 1, 2, and 3 revealed the L2-L3 right broad based disc protrusion and disc space narrowing with a right intraforaminal and paracentral disc protrusion which would compress the exiting right L2 nerve root and the L3 nerve root at the cauda equina as well. (Figure 1) There was also central canal stenosis at the L2-L3 level related to the retrolisthesis disc protrusion and posterior element hypertrophy. The other levels of the lumbar spine also revealed disc herniation and degenerative change, especially at the L3-L4 level.
where a minor broad based disc bulge was seen and at L4-L5 where a broad based disc bulge or protrusion on the left side was also seen. (Figure 2) The L5-S1 disc level showed complete loss of disc height and slight retrolisthesis but no stenosis. There was bilateral lateral foraminal stenosis at the L5-S1 level related to degenerative spurring but this did not compress the exiting L5 root. (Figure 3)

Treatment of this patient consisted of trigger point therapy from the L2-L3 right far lateral disc herniation throughout the distribution of the femoral nerve into the right anterior thigh. Positive galvanism was applied to the L2-L3 disc herniation as well as the right anterior thigh, and this was followed with tetanizing currents and ice application. This patient was placed on a pain formula (Disc & Joint Pain Relief Complex) consisting of boswellia serrata, devil’s claw, and white willow bark. At home, he applied ice to the back and did knee chest and abdominal stabilizing exercises as tolerated. After nine visits the patient noted some relief of the low back pain and beginning relief of the right anterior thigh pain. After thirteen visits, the patient began to notice relief of the right anterior thigh pain to a VAS of 8. Also note that we are also beginning to use unattended intermittent traction and decompression with the application of the electrical currents following manipulation.

On the sixteenth visit, the patient noted definite relief of the right anterior thigh pain and he could begin to sleep at night. On visit number twenty-two, the leg pain of the anterior right thigh was 50 percent improved and was showing good centralizing of the pain to the hip area. The pain continued to recede until following two months of care, and thirty-two visits, the pain was reduced to a VAS of 2 in the right anterior thigh. The patient was sleeping. He was walking without pain, and both patient and doctor recognized that he was coming along very well. The medical doctor who had said that we would not be able to help him never responded to his relief.

The interest in this case is that we definitely see numerous levels of disc problems on MRI. However, the far lateral L2-L3 level disc herniation would certainly account for compression of the L2 and L3 nerve roots and dorsal root ganglions, and this was our primary level of treatment. Even though there were L3-4 and L4-5 disc herniations and facet arthrosis and stenosis, we still felt safe in contacting the L2 spinal process as we would be decompressing the discs inferior to the L2-L3 level without any danger of introducing further stenosis by contacting the L3 or L4 spinal process.

Therefore, the decision to treat the proper level in this case was of great importance to this author. It is this author’s experience that these far lateral upper lumbar discs with femoral radiculopathy can be extremely challenging to treat. You will see that we treated a total of thirty-two visits to attain total relief. The upper lumbar discs are far more challenging, in this author’s opinion, then lower lumbar discs. They occur later in life following degeneration of the lower lumbar discs leading to the instability and degenerative changes within the now hypermobile upper lumbar disc levels. There was no doubt that the medical doctor would have done surgery in this case had the patient yielded to that opinion.

I hope that this case shows the correlation of the nerve, the level of disc herniation, the challenge of the case, and the successful outcome that we can attain in treating these upper lumbar far lateral disc herniations. Knowing the difficulty of treating upper lumbar disc herniations, so often far lateral, is a definite challenge that the doctor must be prepared to take on.

Sincerely yours,
James M. Cox, DC, DACBR