L4-5 Disc Herniation with Motor Weakness: A Journey to Low Back Pain and Left Leg Pain Relief via Surgeon Consults, Steroid Injections and Finally Successfully with Cox® Technic

by
James M. Cox, DC, DACBR
Diplomate, American Chiropractic Board of Radiology
prepared on
October 20, 2011

Introduction / History / Examination / Imaging:

This 42 year old white female is seen for low back and left leg pain with Grade 3 of 5 left dorsi-flexion of the foot at the ankle and Grade 1 of 5 extension of the extensor halllucis longus tendon of the great toe.

She has been seen by two orthopedic surgeons who have scheduled her for a selective foraminal steroid injection.

An MRI, shown in Figures 1 and 2 was ordered on her first visit due to the motor weakness. The MRI shows on sagittal image loss of signal intensity at the L4-L5 disc with a large left paracentral disc prolapse that contacts the cauda equina and the left L5 nerve root.

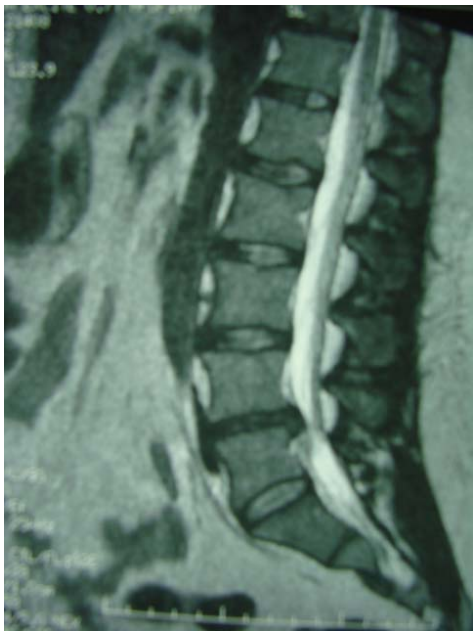

Figure 1: Note the degeneration and protrusion of the L4-5 disc on this T2 weighted sagittal study.

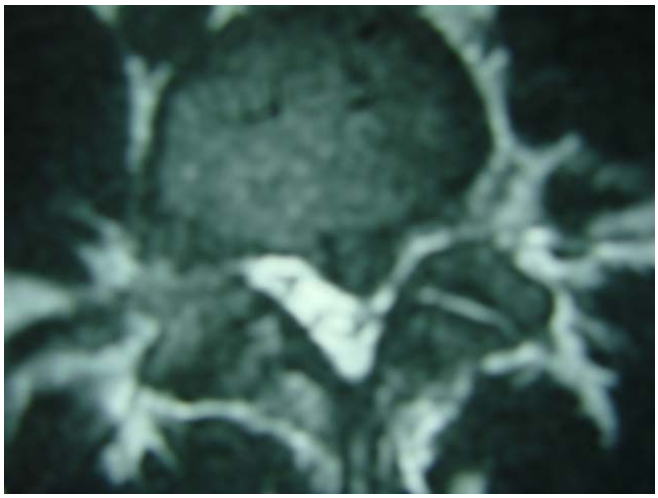

Figure 2: Note the large left paracentral disc extrusion compressing the cauda equina and the left sided L5 nerve root on the T2 weighted L4-5 disc view.

Treatment Plan And Goal:

Long y axis decompression with flexion distraction of the L4-L5 disc space is instituted with Protocol 1. This is followed by positive galvanism for 12 minutes and tetanizing bilateral electrical stimulation at the L4-L5 level, the left posterior retrotrochanteric space, and the anterior tibialis muscle.

Home care consists of ice to the low back for 30 minutes two times a day.

Outcome:

On day two after the first treatment, the dorsi-flexion strength at the left ankle for 4/5 and of the great toe 2/5.

This case was very closely monitored for any progressive neurological deficit that would necessitate surgical discectomy. After treatment from October 20, 2011, through December 23, 2011 (12 visits), there was gradual relief of the left lower extremity pain with return of motor power of the left great toe dorsiflexion and dorsiflexion of the foot until her pain was VAS zero and motor power 5/5 at the ankle and 4/5 at the great toe. As of December 23, 2011, this patient has not been seen because the number of visits allowed by her insurance company expired, and she would not fund her own care. Luckily, her insurance coverage equaled her required treatment.