



CASE REPORT #1 — Disc Herniation L5-S1

This report discusses a young man, very active with no awareness of the degenerative and developmental weaknesses of his low back, who expects, unrealistically, that he can be adjusted, operated on, or drugged to rid him of his pain so he can perform any activity of daily living without pain. You know the case. You have been placed in this position before with patients. Unless there is agreement on what is needed for care by both physician and patient and what realistically can be expected as a clinical outcome, there will be disappointment. Remember the Niendo and Haldeman paper that pointed out that 41% of patients stopped chiropractic care without being dismissed. I offer that this is largely due to failure to explain the problem to the patient and realistically discuss clinical expectations.

A 36 year old white married male is seen 12-3-02 for low back and left lower extremity pain which radiates into the anterior thigh to the knee, and the posterior thigh, lateral leg, and into the dorsal of the foot to the great toe which is numb. This is the most severe pain that he has ever experienced in his low back or lower extremities. In January 2001, he was seen for pain extending down the left posterior thigh, lateral leg, and dorsal of the foot with a clinical diagnosis of an L4-L5 disc herniation. We successfully treated to relieve this pain in January 2001, but as typical of many patients, he did not continue his stabilization exercises, over-utilized his low back in bending, lifting, and twisting, failed to understand the severity of his back problem, and therefore did nothing to prevent the recurrence of this problem in December 2002.

Examination on 12-3-02 revealed no motor weakness of the lower extremity, gluteal, or adductor muscles. No analgia was noted except for a loss of the lumbar lordosis. The deep tendon reflexes at the knee and ankle were plus 2. The straight leg raise was positive at twenty- five degrees on the left side producing primarily leg pain. No urinary or bowel problems were noted.

Due to the reoccurrence of this patient's low back and lower extremity pain, the decision was made to order an MRI, not so much as to define that the disc herniation was present as to demonstrate to the patient the pathology of his spine.

The MRI, axial and sagittal views are shown here.

The axial image shows a far lateral intraforaminal and extraforaminal L5-S1 disc protrusion, which effaces the exiting left L5 nerve root. See figure 1. This is also appreciated on the sagittal image. See Figure 2. Facet arthrosis is also noted at the L5-S1 level on axial image. See Figure 1.

Note that the sagittal image, Figure 3, shows a large Schmorl Node defect into both the inferior L4 and superior L5 endplates. Schmorl nodes are also noted at all other levels of the lumbar spine, indicating degenerative change and loss of normal disc tissue at all disc levels. Figure 4 shows L4-L5 posterior disc bulging which mildly flattens the ventral aspect of the thecal sac and extends into the right neural foramen. The L4 nerve roots appear to not be compressed. The L3-L4 disc level also shows mild posterior disc bulging which does not impinge upon the neural elements.

The MRI in this case demonstrates to the patient the extensive degenerative changes of all lumbar discs and demonstrates a lifestyle change in activities in day to day living if one is to avoid future back pain. This demonstration is also excellent for his wife, who felt that he should just have back surgery, which she said would totally correct the problem. As we so often see in clinical practice, unless there is an understanding by all parties involved (in this case spouses), and our clinic, good clinical outcome is hampered.

Treatment in this case consisted of positive galvanism into the far lateral left L5-S1 disc herniation followed by tetanizing current into the left paravertebral and posterior hip muscle groups, mainly the gluteus maximus, piriformis, gemelli muscles while ice was applied to the low back and left buttock. This was followed by distraction flexion of the L5-S1 disc consisting of 3 twenty-second sessions of distraction, each twenty seconds consisting of 5-four second pumping actions of the L5-S1 disc. The spinous process of L5 was contacted during each distraction application. A back brace was placed on this patient. He was sent home with instructions to apply ice every four hours for thirty minutes, no sitting, and he was treated two times on the first day, in the morning and in the afternoon. Following this, daily visits were given and on the third day the lower extremity pain had decreased from a 10 to a 6 on a visual analogue scale. By day 6 the pain had centralized out of the calf and was localized to the thigh, hip, and low back. On day 8 the pain was 50% reduced and distraction adjusting was then begun at the L4, L3 and L2 level as well as L5-S1. On the tenth day of treatment all lower extremity pain was absent and only pain localized to the left low back radiating into the piriformis, gluteus maximus, and gemelli muscles. He was in complete remission of the problem in three weeks care. It is stressed to this patient in *Low Back Wellness School* and in clinical treatment that a disc requires three months to heal and that return to heavy use before complete healing can lead to recurrence of the disc tear and protrusion with sciatic pain. He was given the patient book of home care to follow (*Low Back Pain: What It Is and How It Is Treated*) which stresses the use of ice, hot and cold alternating packs at home, acupuncture massage by family members, avoidance of sitting, wearing a back brace, nutrition (see discussion below), time of healing and the remission and exacerbation of symptoms while under care, and the frequency of care. He was given a brochure on Cox® Distraction (Cox® Distraction Manipulation: What It Is and Why It Is Used) which explains what Cox® Technique is, how it is applied, the research behind it, outcome study results of days and visits to maximum improvement, and a discussion of the answer to "when will I be better?"

The treatment on each of these days consisted of the distraction adjusting, consisting of 3-twenty second distraction sessions, each consisting of 5 four-second pumps. Tolerance testing was carried out prior to the first treatment session and did not cause any iatrogenesis. The use of low volt galvanic and tetanizing currents was given on each visit.

Nutritionally, this patient took the supplements for "Clinical Spinal Nutrition" – (1) Discat Plus, which is chondroitin and glucosamine sulfate, manganese and magnesium sulfate, and calcium citrate. (2) He also was given Formula #2 Non-Phosphorous Calcium Citrate tablets alone, 200 mg per tablet, three a day. (3) He was started on Formula 1, a multi-mineral, vitamin, enzyme, herb, and amino acid formula. Exercises were started on the very first day of treatment and they consisted of abdominal muscle strengthening, pelvic tilt, and knee chest exercises. It is important to start patients on active care at the beginning of treatment so as to prepare

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Low back wellness school was attended by both this patient and his wife on January 13, 2003 so as to learn the ergonomics of low back pain, and how to perform the activities of day to day living without causing aggravation of this low back and lower extremity problem. This is mandatory for his future back health due to the mechanical and structural faults of this spine, which are irreversible and must be controlled in daily activities.

Prior to seeing my clinic, this patient had been seen by another chiropractor whose side posture adjusting aggravated his low back and leg pain. Remember that the leading cause of malpractice in our profession is aggravation or causation of disc injury.

This is an excellent example of a very difficult stenotic spine, which was well handled through the use of Cox Distraction adjusting procedures as described above. It is, in my opinion, only the sound diagnosis, strong distraction adjusting, home active care, cooperation of the family, low back school, and complete cooperation that allows a difficult case such as this to attain such outstanding clinical results. It is this type case with its care that makes our profession shine and gain the reputation we all seek. It is well known that I prefer to adjust all spine pain patients under distraction.

I plan to present this patient, with 15 to 20 other cases, in clinical rounds at the March 7 to 9, 2003 Fort Wayne Part I certification course in my work. This is the certification course of National University of Health Sciences in Flexion Distraction Adjustment procedures. Contact Julie at 1-800-441-5571 for information or check www.coxtechnic.com/seminars.html. Should you have any questions, interest, or comments on my treatment, please contact me.

Case presented by James M. Cox, D.C., D.A.C.B.R.