Spinal Stenosis Due To Advanced Degenerative Disc Disease, Retrolisthesis, And Ankylosing Spondylosis Of The L2-L3 Segments

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History: A 74 year old man who two months previous to seeing us was bending and twisting at the waist and developed low back pain which within a few days extended down his left leg in the posterior thigh, calf and outside of the left foot seeks our help. He has had low back pain on and off all his life and forty years was told by an orthopedic surgeon to avoid surgery if possible. He consulted a chiropractor a few years ago and was helped with his low back pain. He now is considering being treated by our clinic, as he was advised to consult us by another patient, or go to an orthopedic surgeon for possible surgery. He does not really want to have surgery.

Examination: Range of motion shows flexion to eighty degrees that relieves his left leg pain while even five degrees of extension at the thoracolumbar spine increases his low back and left leg pain. Straight leg raise on the uninvolved right leg with Braggard maneuver increases the left leg pain (positive crossed leg sign) while the involved left leg finds increased leg pain at twenty degrees of leg raise and marked exacerbation of leg pain with the Braggard maneuver. The patient stands in a flexed thoracolumbar spine posture. He can heel and toe walk with increased left leg and calf pain. Deep tendon reflexes are plus two at the ankle and knee and hamstring muscle bilaterally. Dejerine triad increases the left leg and low back pain.

X-ray examination: Figures 1 and 2 are anteroposterior and lateral lumbar spine and pelvic studies recumbent. Please see the x-ray with the legend description.



Figure 1. Advanced degenerative disc disease with vacuum change is seen at the L2-3 and L5-S1 disc levels. L2-3 has anterolateral ankylosing spondylotic disease due to advanced osteochondrosis. L2 is in retrolisthesis. Note the advanced L5-S1 disc space narrowing the endplate hypertrophy and retrolisthesis of L5 on sacrum.

The L3-4 and L4-5 discs are degenerated as well.



Figure 2. The L2-3 disc shows left ankylosing spondylotic change. Degenerative disc disease is seen throughout the lumbar spine as appreciated on the lateral view in Figure 1.

Diagnostic impression: Spinal stenosis due to advanced L5-S1 disc disease resulting in nerve root and dorsal root ganglion compression and chemical inflammation causing left leg sciatic radiculopathy

Treatment plan and goals: Flexion distraction is performed after tolerance testing and cuff are applied at the first treatment session. Both manual and long y axis attended and unattended decompression are used while galvanic current for tissue inflammation reduction and tetanizing current for circulation and muscle relaxation are applied to the L5-S1 disc and left posterior hip muscle group and sciatic nerve. Protocol I procedure is utilized for the radiculopathy patient.

Result of first visit: The patient felt leg pain relief that recurred upon upright posture. He felt relief and was happy with the care. He was sent home to apply ice three times a



day for thirty minutes each to the left lumbar spine and left posterior hip muscle group. Discat plus is prescribed to take 4 at breakfast and 4 at dinner. He is to avoid sitting long periods, over 15 minutes, and to start the first three Cox exercises which are knee chest, pelvic tightening and lift. He will be treated daily until fifty percent relief of his pain. The goal is to attain fifty percent relief within four to six weeks of care. If fifty percent relief is not attained, or if there should be progressive neurological signs, an MRI will be taken to more adequately define the spinal stenosis. Epidural steroid injection may be advised and if the pain remains unresolved, surgery, if fifty percent relief is not attained at four to six weeks of care. It is also stressed to this gentleman that fifty percent relief of pain can be an adequate clinical relief and one hundred percent relief is not realistic in such cases of advanced stenosis.

It is vital to stress that stenosis cases such as this are increasingly seen due to the baby boomer aging populus. A new philosophy and treatment mode are required to handle such cases as this. Side posture adjusting and posterior anterior high velocity thrust adjusting will not be tolerated by this patient and the millions of other aging people like him. It is this author's opinion that the procedure described here is the superior form of chiropractic spinal manipulation to be applied for such spinal stenosis cases. Also remember 50% relief of pain can be an excellent clinical outcome in such cases as this and the patient must be adequately informed of the surgical expectation compared to Cox flexion distraction and decompression adjusting. As a follow-up, the patient did not accept my treatment because Medicare would not cover all the expense.

Respectfully submitted, James M. Cox, D.C., D.A.C.B.R.