CERVICAL SPINE STENOSIS CONTROLLED WITH EPIDURAL STEROID INJECTIONS AND LONG Y AXIS COX® DECOMPRESSION ADJUSTING

Figure 1

Figure 2

Figure 3

Figure 4

In March 2003, a 69 year old female is seen complaining of headaches (VAS 10), neck pain (VAS 5) and bilateral arm pain (VAS 8). Also low back and leg pain bilaterally (VAS 8).

History: She has sought neurological advice, been to an acupuncturist, offered surgery for the cervical spine and arm pain, told not to have surgery, and she is a diabetic and told the leg and foot pain is neuropathy. She had triple bypass surgery in 1999, carpal tunnel surgery in 1984, foot surgeries in 1990 and 1992, and a c section in 1965. She is on nexium, norvasc, diovan, glucophage, and aspirin. She works full time as a delicatessen worker.

Imaging: X-rays shown in Figures 1, 2, and 3 show extensive C4-5, C5-6, C6-7, and C7-T1 degenerative disc disease with attempted ankylosis by anterior osteophytic spurs at the C5-6 level. Advanced facet arthritis is present at the left C4-5, right C5-6, and left C6-7 levels. Foraminal stenosis at the left C4-5 canal due to arthritic degeneration and hypertrophy of the facet joints is noted and this is noted to a less extent on the right side. C2 right posterior body rotation subluxation is present. Flexion and extension studies shown in Figures 2 and 3 also reveal instability of C5 on C6 on motion. Not shown are lumbar x-rays taken in March 2004 showing generalized disc degeneration throughout the entire lumbar spine, most marked at the L4-5 level. L1-2 osteophytic bridging is seen.

Diagnosis: A diagnosis of C4 through C7 degenerative disc disease with foraminal stenosis at the C4-5 level and extensive facet arthrosis is made. Treatment of long y axis decompression adjusting of the cervical spine and lumbar spine using Cox® protocol I followed with positive galvanic current to the involved disc and nerve root levels in the cervical and lumbar spines was given. The frequency of care was twice weekly and reduced to weekly as patient response became positive for centralization of extremity pain and active home care and exercises became more possible and performed regularly. By May 2004, she felt 75% reduced pain in the spine and extremities. In September 2004, she developed much left upper extremity pain. A neurosurgical consultation was made and it was reported that she had severe numbness and pain in the left shoulder, radiating down to the left thumb and index finger. She had been managed well with chiropractic until August 2004 when the left arm pain set in. Deep tendon reflexes of the upper extremities are 0/-2 at the left biceps, 0/-2 at the triceps, quadriceps 0/0 and ankle jerks -3/-3. Babinski is downgoing and Hoffman sign is negative. No motor or sensory abnormalities of the upper or lower extremities is noted.

MRI Findings: An MRI was ordered in September 2004, and myelographically enhanced CT scan was performed October 1, 2004. Figure 4 shows the sagittal MRI with degeneration of the C4 to C7 disc spaces and C5-6 posterior hard endplate and soft disc protrusion and posteriorly is ligamentum flavum hypertrophy to create spinal stenosis. C5 is in anterolisthesis on C6. The C6-7

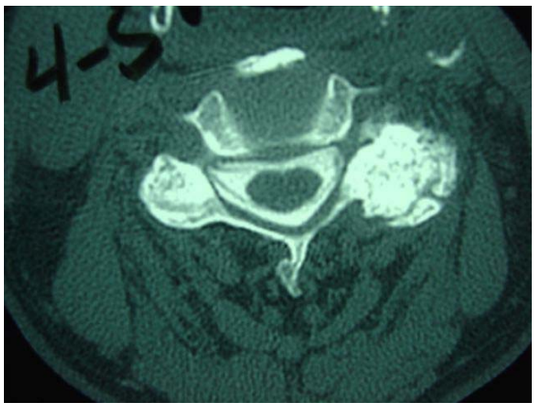

Figure 5

disc level reveals degenerative changes with posterior ligament hypertrophy to create spinal stenosis. Figures 5 is the axial image at C4-5 showing left facet hypertrophy with mild-moderate bony encroachment of the left neural foramen. Figure 6 is the axial study at the C5-6 level showing right facet hypertrophy greater than the right side with right greater than left uncovertebral joint osteophytosis. There is moderate right bony encroachment of the neural foramen and minimal spinal stenosis, with partial effacement of the anterior cerebrospinal fluid column. Figure 7 shows the C6-7 axial image of the myelographically enhanced CT scan showing bilateral facet hypertrophy without significant neural foraminal stenosis.

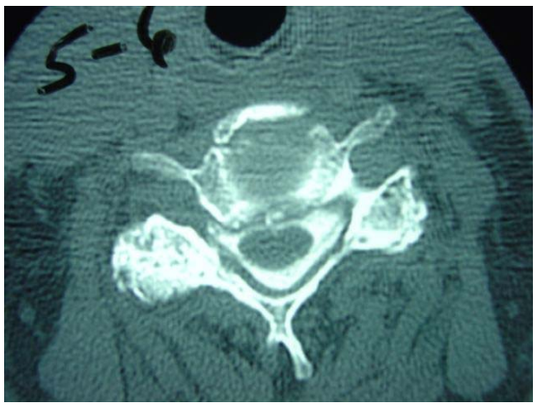

Figure 6

New Imaging & Exam: The imaging and examination findings result in the diagnosis of spondylosis of the mid and lower cervical spine, at C4-5 there is mild left foraminal neural narrowing. At C5-6 there is right neural foraminal narrowing and minimal spinal stenosis and at C6-7 there is mild spinal stenosis due to advanced facet hypertrophy. No motor or sensory findings of the upper extremities were noted of the left upper extremity where C6 dermatome pain was documented. Deep tendon reflexes were diminished at the biceps and triceps muscles. No motor or sensory findings of the upper extremities were noted. Left upper extremity C6 dermatome pain was documented.

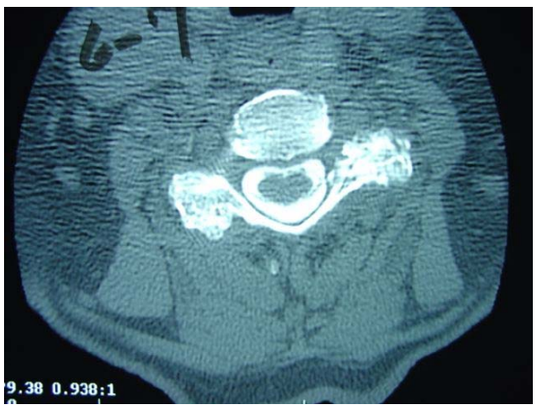

Figure 7

After the Surgical Evaluation: Following neurosurgical evaluation, the patient decided to undergo epidural steroid injection and continue with decompression adjusting at our clinic and the surgeon felt this a good option that he could support. The first epidural steroid injection was not felt to be of help to the patient immediately. We continued our adjustment plan. Within 3 weeks after the steroid injection and continued decompression adjusting, she showed improvement with continued chiropractic measures and cervical epidural steroid block. The surgeon was pleased and advised continued care with us and he would check her in 6-8 weeks. She underwent a second ESI on November 4, 2004, and was adjusted with decompression within two hours afterward. The patient continued full time employment and also did yard work which aggravated the left arm pain. On November 23, 2004, she noted decreased shoulder and left arm pain to a VAS of 7 from a previous 10. Treatment continues to be decompression adjustments, electrical stimulation with galvanic and tetanizing currents to the C4-6 levels of the neck and down the left arm at the extensor location of the C6 nerve distribution. A third ESI was given on December 2, 2004, and the adjustment given immediately after. On January 3, 2005, she is over 50% relieved of her cervical spine and left arm pain and she is happy with her progress. On January 13, 2005, her chief complaint is low back pain and cervicothoracic spine pain without left arm pain.

Comment: This is a condition we see with increasing frequency as our population ages. These degenerative changes must be dealt with. Imagine surgery for this case, it would involve numerous levels and probably fusion due to the instability and multilevel involvement. This patient could never withstand rotation extension adjusting. Long y axis decompression Cox® adjusting with epidural steroid injections successfully alleviated the pain. Also, as a side benefit, we also relieved her sciatica and low back pain - a condition that could be a major course of care in itself. Here it is only an added benefit for the patient. Of course, future supportive care will be necessary and will be delivered as patient needs surface. Working with surgeons like in this case is a good interdisciplinary boost for me and my profession in Fort Wayne, Indiana.

If my approach to diagnosis and treatment of conditions such as this are of value to you, please let me know. If you would like to present a case from your practice please feel free to do so.

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