DEGENERATIVE SPONDYLOLISTHESIS AT L4 WITH SPINAL STENOSIS – FLEXION DISTRACTION MANIPULATION OR SURGICAL FUSION?

This 71-year-old, white female is seen for the chief complaint of low back and bilateral posterior thigh pain. She has no motor deficits, the deep tendon reflexes are +2 at the patella, hamstring, and ankle. She has complained of this pain for 18 months and has underwent 3 epidural steroid injections, facet joint injections, physical therapy, medications, and surgery with fusion of the lumbar spine has been recommended. We are asked to see the patient at this time.



Figure 1 is a lateral lumbar radiograph showing approximately a 30% anterior slip of L4 on L5 representing degenerative spondylolisthesis.

Figure 2 is the sagittal T2 weighted MRI study showing the L4 degenerative spondylolisthesis and the stenosis caused by ligamentum flavum hypertrophy and posterior disc bulging.





Figure 3 is the axial image, T2 weighted, showing the marked thickening of the ligamentum flavum, generalized posterior disc bulging, a right subligamentous synovial cyst, resulting in severe acquired spinal stenosis, allowing the thecal sac to be narrowed to 4mm. The facet arthrosis is noted bilaterally.

Figure 4 shows a small left posterior T11-T12 disc protrusion, which barely contacts the thecal sac.



The diagnosis of this patient's low back and thigh pain is the severe spinal stenosis at the L4-L5 level created by the radiographic findings described above.

TREATMENT RECOMMENDATIONS:

Due to the decision to not do spinal fusion and decompression, this patient has chosen to undergo Cox® flexion distraction decompression treatment for her condition. She had also seen a decompression owner who recommended a series of 15 treatments on an unattended decompression table. She chose our care. We will expect to have at least 50% improvement within 2 months of care or surgical intervention will be recommended. The frequency of flexion distraction treatment will be 3 times per week for 8 weeks. If the patient shows positive response, visits may be decreased during that 8-week period. However, it is felt that this 8 weeks of treatment is necessary to determine if our care can benefit the patient sufficiently to avoid surgical intervention. Of course,

she will be closely monitored for progressive neurological deficit which might require surgery. In addition to the manipulation, she will also receive positive galvanism at the L4-L5 stenotic level followed by tetanizing currents to the lumbar spine and bilateral posterior hip muscle groups following spinal manipulation.

Clinical outcome as of 8-15-06:

Relief of the back and thigh pain is 70%. She performs her activities of daily living without hindrance. She is happy with her quality of life and will not undergo spinal fusion at this time. The above described course of care was given for this 3 month evaluation. Not a cure, but control of pain with flexion distraction decompression adjusting. Degenerative spondylolisthesis is a common condition, seven times more frequent in women than men, and is featured with degeneration of both the intervertebral disc and facets. Ligamentum flavum hypertrophy is common to create spinal stenosis and we will see increasing numbers of these conditions with the advancing age of the populous today. Treatment as outlined in this case serves as a good template for flexion distraction care of spinal stenosis induced by degenerative spondylolisthesis. Remember, we do not cure stenosis, but can control its pain production – thus avoiding or delaying surgical intervention which many people do not wish to have (with good reason).

Respectfully submitted,

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