Two-level Degenerative Spondylolisthesis

January 24-25, 2015
Tampa, Florida
Kurt J. Olding  D.C.

Stenosis

- This case is a perfect example of the need for spine specialists utilizing evidence-based clinical guidelines to give patients the most effective care.
- IT IS THIS DOCTOR’S OPINION THAT THIS CASE WAS A DISASTER WAITING TO HAPPEN.

History

- 74 year old female, a farm wife leading an extremely busy lifestyle managing the farm.
- She fell in December, 2013 and fractured her humerus. Healing did not go well and she underwent shoulder replacement in June 2014.
- Sharp right side lumbar pain began in April of 2014.
- This pain radiated to the right GOIC region.

History

- She was initially treated with NSAIDS without relief.
- Two 4 week courses of PT followed with a month break in between.
- Her family dr. then referred her to an orthopedic surgeon who did two epidurals with no relief.
- He said he could offer surgery which would involve fusion from L4 to S1.
Our Office

- She presented on 12/5/14 with acute right lower back pain radiating to the right GOIC region. She walked with a pronounced right limp and had difficulty getting from the parking lot to the waiting room. She was very apprehensive about chiropractic but was deathly afraid of surgery. Her expressed goal was to be able to stay on her feet and continue to perform her duties on the farm. She brought along her MRI and some thoracic x-rays she had after her fall.

History

- Her pain became severe with standing or walking and was relieved by rest quickly.
- She graded the pain at 8/10 and her initial revised Oswestry score was 68.

Physical

- 5’2”, 180, BMI-32.92
- Blood pressure 128/72
- Heart normal sinus rhythm
- Lumbar ROM- flexion-50, extension 0, right lateral-15, left lateral-15, rotation 20 degrees bilaterally

- Gluteal muscle tone was poor bilaterally
- 15 degree flexion antalgia
- Bechterew’s and SLR were negative bilaterally
- Kemp’s and Minor’s sign were positive on the right
- Achilles reflexes were diminished bilaterally 1/5
- Sensory exam was normal
MRI

- Views to follow multiple level degenerative arthritis with degenerative spondylolisthesis at L5/S1 and at L4/5.
- Classic stenotic signs are present from L1 thru S1 with ligamentum flavum thickening and facet arthrosis.
X-Rays

Treatment

- Explained 50% rule to patient and she emphasized she would be extremely pleased with that.
- Initially attempted to place patient on stomach and she was very uncomfortable. Due to the two level spondylo I did not want to try a balster because I felt it would be too aggressive.
- ALWAYS TREAT SPONDYLOLISTHESIS WITH LESS FORCE!!!!!!

Treatment

- Patient was placed right side up with knees bent in fetal position.
- Sidelying flexion coupled with y-axis decompression was tolerated well. I also placed the table into slight flexion to further open up the right side.

Results

- The patient was treated 9 times over 4 weeks and her pain dropped from 8/10 to 1/10.
- She was instructed to get off her feet multiple times thru the day and use moist heat on her back for 15 minutes. She understood that to continue to be as active as she desired she needed to give her spine these short breaks.
- Her revised Oswestry score improved from 68 to 22 at discharge.
Results

- The patient decided to come in monthly to maintain her improvement and try to avoid further progression of her stenosis.

Why Important

- Over the previous ten year period, 629% increase in Medicare expenditures for ESI, 423% increase in expenditures for opioids for back pain, 307% increase in the number of lumbar MRI’s, and a 220% increase in spinal fusion surgery rates
- After ten years of these increases disability from m/s disorders is rising not falling!

Why Important

- Spine-2005 Jun 15; 30(12): 1441-5; discussion 1446-7
- Deyo, et al revealed that fusion rates went up the most rapidly in the over 60 age bracket. The most rapid increases happened after the approval of new surgical implants and far exceeded the increase in other orthopedic procedures

Why Important

- European Spine Journal-2014 Sep;23(9):1903-17
- Mannion, Pittet, et al
- Interesting study where 12 international multidisciplinary experts were given 744 hypothetical scenarios and told to rate appropriateness for surgery in all of these cases of degenerative spondylolisthesis.
Why Important

• Three variables were determined to create a rating of appropriate
• No yellow flags
• Severe disability
• Severe neurological deficit

Why Important

• 2 billion dollars spent in Florida alone in 2010 for fusion surgeries
• Buchbinder-Best PRACT RES CLIN RHEUMATOL. 2013 OCT;27(5):575-89, back pain is leading cause of disability globally ahead of 290 other conditions.
• Estimated cost of lumbar fusion in the U.S. is 80-100,000 dollars

Why Important

• Our cost for this patient was $450