Left Sciatica Complicated by an L4-L5 Fusion and a Left Total Hip Replacement Treated with Cox® Technic

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DISCUSSION:

Post-surgical continued pain (PSCP) is pain that persists or returns in the same or adjacent area following spine surgery (aka failed back surgical syndrome).

Patients who have multiple surgeries are more likely to have PSCP. One hundred two patients with "failed back surgery syndrome" (averaging 2.4 previous operations), who underwent a repeated operation for lumbosacral decompression and/or stabilization, were interviewed by a disinterested third party a mean of 5.05 years postoperatively. Successful outcome (at least 50% sustained relief of pain for 2 years or at last follow-up, and patient satisfaction with the result) was recorded in only 34% of patients.[1]

Cox® Technic has been shown to benefit those patients with PSCP. A study of 69 post-surgical continued pain patients, 80% of patients demonstrated more than 50% relief of pain at the conclusion of care (3 months) in a mean of 49 days and 11 visits, and 78.6% reported 50% relief of pain at 24 months follow up.[2]

Adjacent segment pathology (ASP) is an adverse effect of spinal fusion that precipitates accelerated spinal degenerative changes at vertebral segments contiguous with the fused vertebrae. The accelerated degeneration related to ASP can be challenging to manage, as it can lead to conditions such as radiculopathy and can create the need for reoperation. Manipulation has been shown to be an effective treatment for the conservative management of lumbar radiculopathy related to adjacent segment pathology.[3]

A multi-disciplinary approach using chiropractic spinal manipulation combined with epidural steroid injection (ESI) is proven to be safe and aid in the treatment of patients with radiculopathy.[4]

CASE REPORT

Presenting Complaints:

A post-surgical continued pain patient, age 69 years, presented herself to my office on April 2, 2019. Her chief complaint was that of daily severe, left leg pain that extended to her ankle. She reports the onset of her pain began in February while doing hip extension exercises during

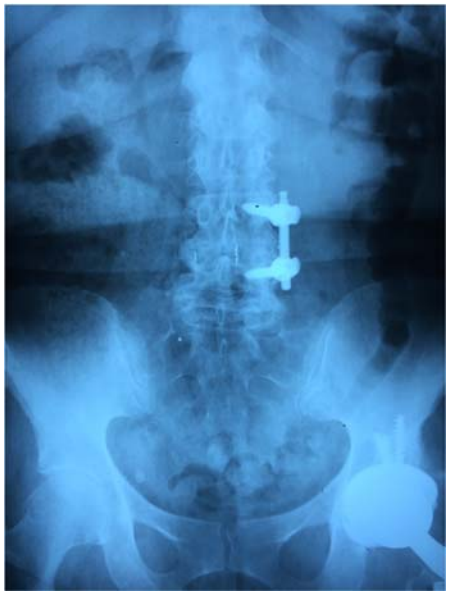
a course of physical therapy for a hip replacement that she had done on November 15, 2018. She describe her left hip and leg pain as a sharp, stabbing pain. She rated her pain a 10 on a visual analog scale of 0-10, with 0 being no pain and 10 being excruciating pain. She reported that twisting, sitting, lifting, coughing, and arising from a seated position increased her pain.

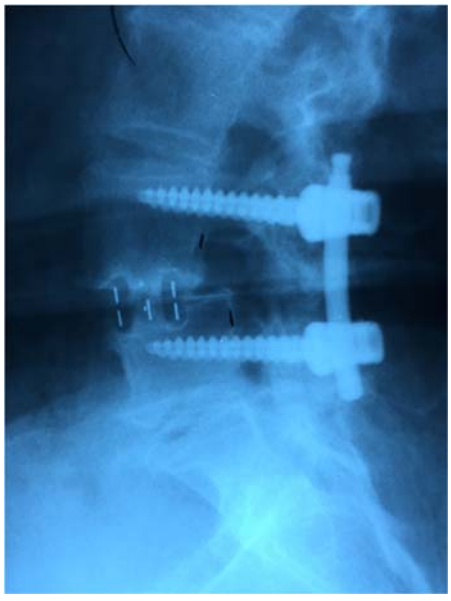
History:
Her history is significant for a previous lumbar fusion in 1988 and most recently a unilateral lumbar fusion on January 17, 2018. She had been prescribed and was currently taking Celebrex (NSAID), Zalephon, Citalopram (SSRI), Xyzal, and L-Thyroxine.

Examination:
The patient walked with a left limp using a cane. She was unable to toe walk or heel walk. Her lumbar range of motion was a full 90 degrees in flexion, but limited to 15 degrees in extension by pain. Kemp's test was positive on the left. Left straight leg raising was positive at 90 degrees. Lindner's test was positive. Lower extremity reflexes were 2+ and symmetrical. Hypoesthesia was noted over the left L5 dermatome. Palpation of the spine produced a pain response with digital pressure over the spinous process of L5. Trigger point sensitivity was noted about the left posterior hip.

Imaging:
Postsurgical, post ambulation lumbar x-rays were obtained on January 18, 2018, at IU Health the day following her last fusion. There is left posterior fusion hardware at L4-L5 with a 4 mm anterolisthesis of L4 on L5. Degenerative disc disease is most pronounced at L5-S1 and L1-L2.

Lumbar x-rays were taken during her initial visit to my office. A degenerative anterolisthesis of L4 on L5 of 25% with surgical discectomy and disc spacer with a left posterolateral osseous and orthopedic fusion at that same level is seen.





Diagnosis:
L5 adjacent segment pathology resulting in low back pain and left hip pain with left sciatica.

Treatment and Outcome:
Protocol 1 of Cox® flexion/distraction/decompression with a contact a L3 was used during her first 12 treatments. Goading was applied to the left gluteus maximus, medius, and minimus muscles and down the left lateral leg ending at the popliteal space. My contacting L5 and stabilizing her left distal femur while using axial distraction gave her the most relief during the treatment. Tetanizing electric muscle stimulation was also applied to the lumbar spine and left hip each session. By her 9th visit automated axial decompression was being used during her EMS. She also was prescribed a daily supplement of EPA-DHA and one containing chondroitin sulfate.

She was fitted for custom made foot orthotics which she began wearing on April 25th. By her thirteenth visit on April 30th she was able to tolerate Protocol II.

Although, her pain level had markedly improved by her visit on May 6th, to a 4 on a VAS, I encouraged her to proceed with a previously scheduled ESI, as her goal was to be able to dance at her nephew's wedding over Memorial Day weekend. Her pain management doctor did an additional epidural 10 days later.

By May 23rd, the last day I saw her before the wedding, she rated her low back pain a zero with a pain level of 3 still in her left hip. She returned Tuesday after Memorial Day very pleased that she was able to dance at the wedding and had a wonderful time. She returned again on May 30th reporting no pain. She was released her next visit on June 10, 2019, pain-free, with no positive exam findings after a total of 23 visits.

Prognosis:
The patient's initial low back disability index on April 4, 2019, was 50. Although she reported her pain seems to be getting better, but improvement is slow, her low back disability index on April 30, 2019, was 58. However, by the time she was released her Low back disability index had fallen dramatically to a 5.

References:

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