THE DEFLAME DIET

Diabetes
Phantom Limb Pain
NSAID Warnings and Integration
Case Report: Tying Research to Clinical Application

Chiropractic Integrative Medicine Management of Chronic Low-Back and Right Lower Extremity Scleratogenous Pain

By George Simmons, DC

Introduction
Scleratogenous pain distribution from facet degeneration and disc degeneration is presented in this case. No true radicular pain is present, only right-sided low-back, pelvic and posterior thigh pain, not extending below the knee. Prior sciatica four years previous to this case was reported, which resolved with conservative care. At the time of sciatic pain, a left-sided L3-L4 disc herniation was found on MRI study.

Of interest is the presence of that left-sided L3-L4 disc herniation three years prior to seeing the chiropractor for the right-sided symptoms of low-back, gluteal and thigh pain in 2014. No MRI was performed after the 2011 study; therefore, we cannot update the MRI change in the three-year period. However, with no progressive neurological signs, the decision to continue conservative care was made and proved successful.

A special point is made that the right-sided low-back, gluteal and thigh pain is on the contralateral side of the left-sided L3-L4 disc herniation reported in 2011. This case is confounded by a three-year time period from the initial 2011 MRI when the patient had sciatic radiculopathy until chiropractic care is initiated for the right-sided back, gluteal and thigh pain; however, it is important to note that the presence of contralateral spine and extremity pain on the side opposite from a disc herniation is documented in the literature. Pain presenting on the side opposite of a disc herniation may be puzzling until the effect of chemical irritation on a nerve root is considered. This phenomenon is a published finding in a report showing at surgery the asymptomatic disc herniation side showed no chemical changes of the nerve like the opposite side.1 This case is reported as scleratogenous pain, stemming from the degenerative process and affecting the facet joints, ligamentum flavum and intervertebral discs; no true radicular symptoms or signs are present.

History
A 66-year-old female is seen with primary complaints of pain in the lower back and in the right glutal area, extending into the right lateral thigh with no pain below the knee. Her low-back pain started at age 16 following an ice skating fall. Four years prior to being seen at this integrative pain center, she began experiencing more severe back pain with associated sciatica, which was treated with facet steroid injections, providing her with pain relief for about four-week intervals. Physical therapy increased her pain and was discontinued.

The patient was initially referred to the integrative pain clinic by pain management in March 2014 for massage therapy with a physiatrist administering medication, spinal steroid injections and trigger point injections, which she found somewhat helpful. The pain rating in March 2014 was 10/10. She received nine massage therapy treatments through November 2014 when she was referred for chiropractic evaluation of her back and extremity pain. When seen for chiropractic evaluation, her sciatica had resolved with centralization of pain to the right glutal and thigh areas. Her pain rating in the previous two weeks was from 5 to 6/10 at the highest and 2/10, which is the level she experiences most frequently.

When seen for chiropractic evaluation, she was having intolerance to standing, prolonged sitting, driving, dancing, walking one block; and fatigue after even a short period of time, which had worsened in the past year. Intermittent tingling sensations in the right lateral hamstring thigh area to the knee were reported. She reports the hip and glutal pain is a bruise-like feeling and an achy feeling in the lower back. She had stopped exercising and walking one month prior to seeing the chiropractic physician because of increased pain. She needs to shift her weight to her left asymptomatic buttock for any relief. She uses a TENS unit, which she finds helpful. She takes Tylenol with Codeine #3 one to two times a day.

Medical history includes chronic fatigue of...
20 years' duration, ulcerative colitis diagnosed 25 years ago, rheumatoid arthritis diagnosed one year ago for which she takes meloxicam, depression and anxiety, hypothyroidism and high blood pressure. Additionally, she is on antiviral therapy for a possible herpes outbreak in the gluteal area where she has pain.

**Examination**

The patient appears pleasant and well at her stated age with vital signs in normal range and a BMI of 23.98. Posture shows internal rotation of the shoulders with low right-sided scapula and shoulder. Ears and iliac crests are level.

Neurological testing reveals 2+ patellar and Achilles reflexes and intact lower extremity strength. Pinch and roll testing demonstrates allodynia over the SI dermatoome on the right, and tenderness is demonstrated upon palpation of the right ischial tuberosity and right sacroiliac ligament.

Lumbar range of motion demonstrates painful flexion with normal range, lumbar extension restricted and painful, rotation restricted and painful to the right and restricted and non-painful to the left. Squatting produces lower back pain.

Kemp’s test demonstrates pain with facet loading on the right side and left. Kemp’s produces right low-back pain, neither side radicular. Supine straight leg raise is negative at 90 degrees on the left with gluteal area pain at 80 degrees on the right. Yeoman’s test demonstrates marked tenderness on the right and negative on the left. Prone knee flexion is restricted and tender bilaterally. Hip internal rotation with the hip flexed 90 degrees is negative for tenderness or restriction bilaterally. There is no significant tenderness in spinal palpation but tenderness at the right sacroiliac joint.

**Imaging**

Figures 1 to 4 are an MRI examination performed in 2011 at which time the patient reported sciatic radiculopathy. This MRI study yields the following impressions:

1. **L4-L5** Five to ten percent degenerative spondylolisthesis, mild broad-based disc protrusion, bilateral facet degeneration and ligamentum flavum inflammatory hypertrophy that contacts the thecal sac.

2. **L3-L4** reveals a left posterolateral disc herniation extrusion with cephalalward migration of the disc material, which coupled with the facet joint degeneration and mild ligamentum flavum hypertrophy produces left-sided foraminal stenosis. This may compress the left L4 nerve root.

3. **L5-S1** moderate right and severe left facet degenerative joint disease (DJD) without stenosis.

Figures 1 and 2 are T2 sagittal and axial images showing L4-L5 broad-based disc protrusion with bilateral facet joint degeneration with hyperintense inflammation bilaterally. Ligamentum flavum is seen bilaterally, which contacts the thecal sac to form mild bilateral canal stenosis. Degenerative spondylolisthesis of L4 on L5 is present and is less than 10 percent slippage.

Figures 3 and 4 are sagittal and axial images at the L3-L4 disc level. Figure 3 shows both anterior and posterior disc protrusion. Axial Figure 4 image shows bilateral facet joint disease. A left posterolateral disc herniation is noted with cephalalward migration of the disc material, which coupled with the facet joint degeneration and mild ligamentum flavum hypertrophy produces left-sided foraminal stenosis. Again,
Appreciate the minimal degenerative spondylolisthesis of L4 on L5.

Assessment
This patient presents with signs and symptoms of chronic radiculitis in the right lower extremity. She has had repeated pain intervention treatments for facet syndrome, as well as physical therapy, but felt her condition deteriorating. Also, the patient presents with comorbidities of rheumatoid arthritis, ulcerative colitis, chronic fatigue, high blood pressure, hypothyroidism, depression and anxiety. Examination shows pain exacerbated with facet loading and sacroiliac joint compression on the right side. Alloidity of the SI dermato-me area and scleratogenous tenderness at the ischium and sacroiliac points suggest SI segment facilitation. Of note, disc protrusion and nerve root displacement are on the L3-L4 less painful side.

Diagnosis
1. Lumbar degenerative facet disease at the L3 through L5 levels.
2. Left posterolateral disc protrusion at the L3-L4 level with foraminal stenosis, producing possible left nerve root displacement.
3. L4-L5 degenerative disc disease with degenerative spondylolisthesis of L4 on L5 and moderately advanced bilateral facet degeneration and ligamentum flavum hypertrophy, producing vertebral canal stenosis.

Treatment Plan
An integrated approach to treatment was implemented. Initial care was dietary and nutritional counseling, as well as facet joint injections, trigger point injections, medication and massage. Chiropractic care was initiated when clinical relief was not forthcoming and consisted of Cox’s flexion-distraction Protocol 1 spinal manipulation, which is summarized as five sets of four-second interactive pumps repeated three times with trigger point therapy between each set to the local area. The contact of the spine is at the L3 spinous process as the distraction manipulation is administered. Sacroiliac blocking and Activator adjustments were also utilized. Additionally, the patient attended group visits addressing chronic pain, conducted by the medical provider and nursing staff.

The patient received consultation and treatment as outlined above from approximately April 2014 to mid-April 2015. This included approximately 12 chiropractic visits from December until April 2015, six trigger point injection visits in the same time frame, 12 massage therapy visits from April 2014 to February 2015 and five chronic pain group visits. Chiropractic treatment involved flexion/distraction Protocol 1, sacroiliac blocks and percussion adjustment at thoracic areas using Activator.

Follow-up evaluation in mid-April 2015 demonstrated marked improvement in symptoms. The patient reported that she felt the best she had in three years, is sleeping well and is now walking two-and-a-half to three miles a day, the farthest in three years. She reports she has had occasional twinges of sciatic pain but infrequently. She rates her average pain level at 2/10. Straight leg raising and Yeoman's test were negative for tenderness or significant restriction. Kemp's demonstrated mild tenderness when performed on the right side. The care plan was reduced to an as-needed basis, but it was suggested that she return for intermittent maintenance chiropractic treatment.

This case report is submitted to demonstrate positive treatment outcome through an integrated medicine team for a patient who failed usual medical spine care. It is likely that this patient's complaints were primarily mediated by her severe degenerative facet disease and disc disease; however, conventional treatment was unsuccessful in improving her condition over a period of several years. Although chiropractic treatment using Cox’s Technic by itself may have been successful in mitigating her symptoms through its positive effects on degenerative facet disease and disc protrusion, massage therapy, trigger point injections, group chronic pain visits addressing psycho-social aspects of pain management, diet and nutrition consulting and integrated medical management of chronic health conditions (i.e., including depression, hypothyroidism, hypertension, chronic fatigue, herpes simplex, rheumatoid arthritis, ulcerative colitis and irritable bowel syndrome) likely assured a more positive and rapid outcome.

Closing Comment From
James M. Cox, DC, DACBR

This case has a patient with right-sided pain in the gluteal and lateral thigh. A left L3-L4 disc herniation is noted but with no motor, reflex or dermatome pain radiating below the knee. The disc herniation is on the side opposite the back, gluteal and thigh pain. I would not label this sciatica, but rather, as Dr. Simmons properly points out, scleratogenous pain from facet arthrosis and discogenic pain from the unstable L4-L5 disc and its spondylolisthesis as well as the L3-L4 disc and facet joint degenerative pathology. Such cases can be resolved successfully with flexion distraction and decompression spinal manipulation.

References