

Case Studies in Pain Management: Radiculopathy

Patient history

Sweeping a grandchild up into one's arms is among the most satisfying pleasures of life - right up until the moment it causes a hernia of the disc at the L4-L5 level. This in fact happened within the past year to a 55-year-old woman who thereafter complained of severe low back pain that radiated to the left lower extremity all the way to the foot and was characterized with tingling sensations and numbness.

The woman's primary-care physician prescribed an anti-inflammatory drug, a muscle relaxant and a low-dose hydrocodone tablet (the latter to be taken two to three times daily), but the pain proved refractory to treatment with these medications. Consequently, she was unable to engage in the physical therapy her doctor had prescribed.

Case description

The patient was referred to us after three months, presenting with a Visual Analog Scale pain score of 7.5. Our examination revealed normal strength and reflex activity, although a straight-leg lifting test was positive (indicative of a radicular component to the patient's pain). Since the patient had been in pain longer than three months and because there were radicular symptoms, it was appropriate to order an MRI study of the lumbar spine without contrast. It revealed the left posterior lateral disc herniation at L4-L5 and also that this condition was causing posterior displacement of the L-5 nerve root on her left side.

Treatment plan

We continued the patient on the medication regimen initiated by the referring doctor and scheduled her for a left L-5/S-1 transforaminal corticosteroid injection to be followed by physical therapy and modification of her medications.

Outcome

The patient showed significant improvement immediately after injection due to the action of the local anesthetic and, as expected, the pain returned within eight hours once the local wore off. But then followed a gradual diminishment of the pain as the corticosteroid began taking effect, allowing the patient to experience a nearly 75% improvement in pain for approximately 18 days. A short time after that, the injection was repeated. This time, improvement was approximately 90% and lasted three months.

The pain relief of the first injection was more than ample to allow the patient to engage in physical therapy, which had to be suspended once the pain returned. Physical therapy resumed after the second injection and was supplemented by a home exercise program.

Improvements were such that the patient could be weaned from the hydrocodone. Ultimately, the patient was prescribed tramadol as her only medication for pain. The patient was returned to the care of the referring physician 18 months ago. She has required no further attention from us.

Discussion

The primary-care physician's choice of sending this patient to a pain management specialist rather than to an orthopedic surgeon was appropriate and cost-effective.

Transforaminal injections are also known as selective nerve root blocks. Using image-guidance techniques, they deliver corticosteroid directly into or adjacent to a point along the spine in order to reduce inflammation around the nerve root and thereby decrease or relieve acute or chronic back pain and associated radiculopathy. These injections are particularly advantageous because they target specific nerves, with the medication directed straight to the source of the pain so that 100% of the dose is delivered where it is most needed and where it will have the greatest effect.

Call 225-368-2300 today to schedule your preferred appointment time. We encourage, honor and welcome your referrals.

