

Letters to the Editor

e Extended Pain Relief Utilizing Lumbar Erector Spinae Plane Block in a Patient with Discogenic Low Back Pain

TO THE EDITOR:

Chronic low back pain is one of the most common ailments seen in medicine; it can be caused by trauma, spinal stenosis, and degenerative disc disease as well as inorganic etiologies such as stress, anxiety, depression, and low educational status (1). The approach to the management of low back pain has been constantly changing with new modalities being utilized every day. Minimally invasive pain management techniques have recently gained traction as viable alternatives to more invasive surgical procedures. The erector spinae plane block (ESPB) is an example of a minimally invasive regional anesthetic technique most commonly used for perioperative pain control in breast, thoracic, and abdominal surgeries (2). Regional anesthesia is used primarily in the surgical setting to decrease pain in the hours after an operation and not typically in the chronic pain world. We pres-

ent the successful use of an ESPB in a patient with chronic discogenic low back pain, decreasing overall symptomatology for 6 weeks.

A 38-year-old female, BMI 30, with no significant past medical history presented to our pain clinic with chronic low back pain for approximately 1 year in duration. She described the pain as localized to the lumbar spine and non-radiating. The patient displayed discogenic symptomatology with pain reproduced when standing from a seated position and bending over. She denied any numbness or sensory deficits. The pain seemed to be localized to the paraspinal musculature and quadratus lumborum. Her physical exam was mostly benign with negative straight leg raise and facet loading testing. Neurological testing was completely negative as well. Magnetic Resonance Imaging (MRI) of the lumbar spine displayed small disc herniations at the

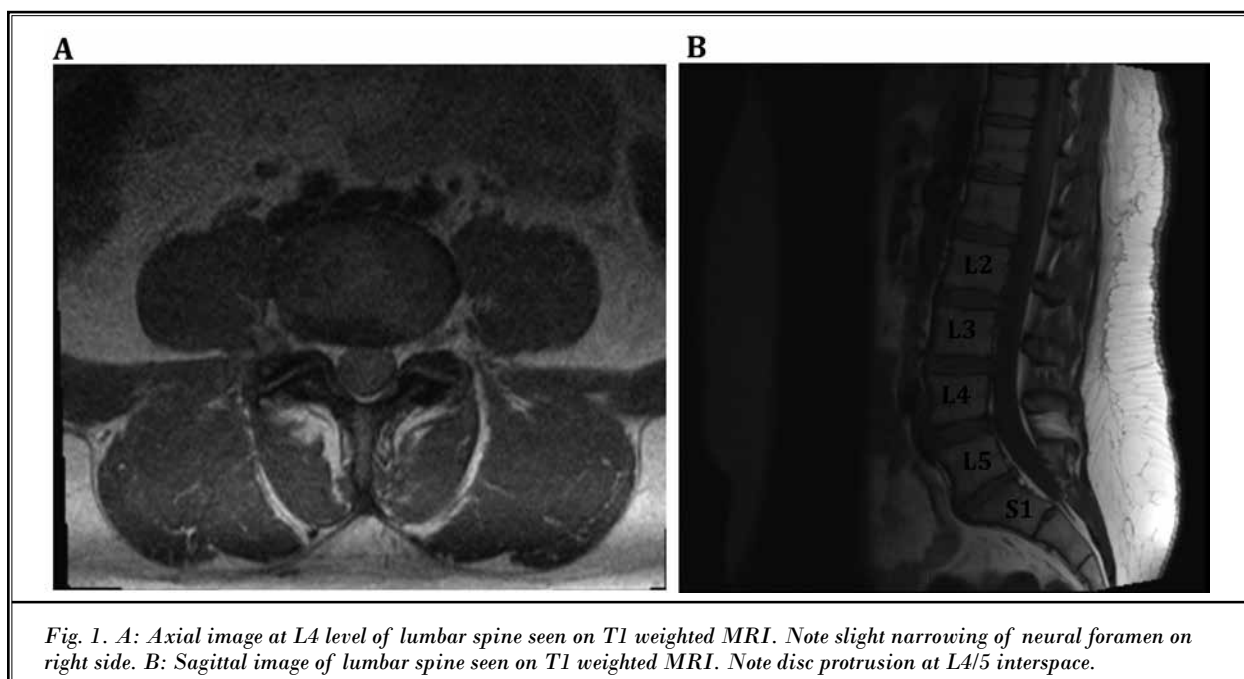




Fig. 2. *Ultrasound imaging of ESPB in lumbar region. Injectate spread can be seen in the fascial plane near the transverse process.*

L 3/4, L 4/5, L5/S1 interspaces without significant spinal canal narrowing or nerve impingement.

She had previously tried conservative therapies with Tizanidine, Tylenol, Cyclobenzaprine, and Advil with no significant success. Subsequently, she underwent trigger point injections with no measurable difference in symptomatology. The decision was made to proceed with a lumbar erector spinae plane block (ESPB). Using sterile technique and ultrasound guidance, a single shot ESPB was administered at every transverse process corresponding to the area of discomfort in the lumbar region. A high-frequency linear ultrasound probe was used. The block was administered via an in-plane technique using a 4 cm 21-gauge stimuplex needle inserted in a cranial to caudal direction. The block needle was advanced through the erector spinae muscles just before reaching the transverse process. Needle placement was confirmed by hydrodissection of the interfascial plane. The total injectate consisted of, 30 ml of 0.2% ropivacaine was mixed with 5 mg of preservative free dexamethasone. This solution was delivered into the interfascial plane deep to erector spinae muscles and above the transverse process on the right

and left sides of the vertebrae. On follow up, the patient reported greater than 80 percent pain relief over a 6-week period.

The management of discogenic low back pain can be particularly difficult to treat (3). One of the main challenges is the lack of radiographic evidence displaying the underlying cause of the symptomatology as seen in our patient's MRI. Muscle spasms are commonly associated with discogenic low back pain as well as small disc herniations (4). Trigger point injections are therefore a common modality used to target those spasms.

Use of the ESPB has not been studied extensively for long-term pain relief in patients with chronic low back pain. Patients who present with refractory muscle spasms that are commonly associated with facet arthropathy or degenerative disc disease may benefit from ESPBs. Further studies are needed to evaluate the safety and efficacy of the LESPB for the treatment of chronic low back pain.

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