

Turning Down the Heat: Lumbar Sympathetic Block for Autoimmune-Associated Erythromelalgia

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INTRODUCTION

Erythromelalgia is a rare neurovascular pain disorder involving episodes of burning pain, erythema, warmth, and edema affecting the distal extremities, particularly the hands or feet. Symptoms are exacerbated by heat or exertion and relieved with cooling. Treatment can often be difficult in patients with underlying autoimmune conditions, such as in our patient. For patients who don’t respond to medications, interventional options like lumbar sympathetic block (LSB) may provide relief. This case highlights the potential role of sympathetic blockade in managing lower-limb erythromelalgia when typical pharmacologic therapies fail.

CLINICAL COURSE

A 64-year-old woman with fibromyalgia and systemic lupus erythematosus (SLE) on immunosuppressants, presented with bilateral foot pain.

- She described the pain as constant, burning, tingling, and sharp, rated 6 out of 10 on the visual analog scale (VAS), which worsened with heat and movement.
- Her symptoms improved with cooling measures and topical compounded creams.
- Examination revealed erythema and tenderness in both feet.
- Imaging was unremarkable.
- She had been treated with pregabalin, duloxetine, capsaicin, and mexiletine, with partial relief but eventually returned three years later with intolerable side effects. TENS therapy was attempted without improvement.
- She complained of worsening pain causing new functional limitations and poor sleep.
- Given the persistence of her symptoms and reduced quality of life, she underwent bilateral L4 lumbar sympathetic block under fluoroscopic guidance.
- At one-month follow-up, she reported improved pain, better mobility, and increased independence with daily activities.



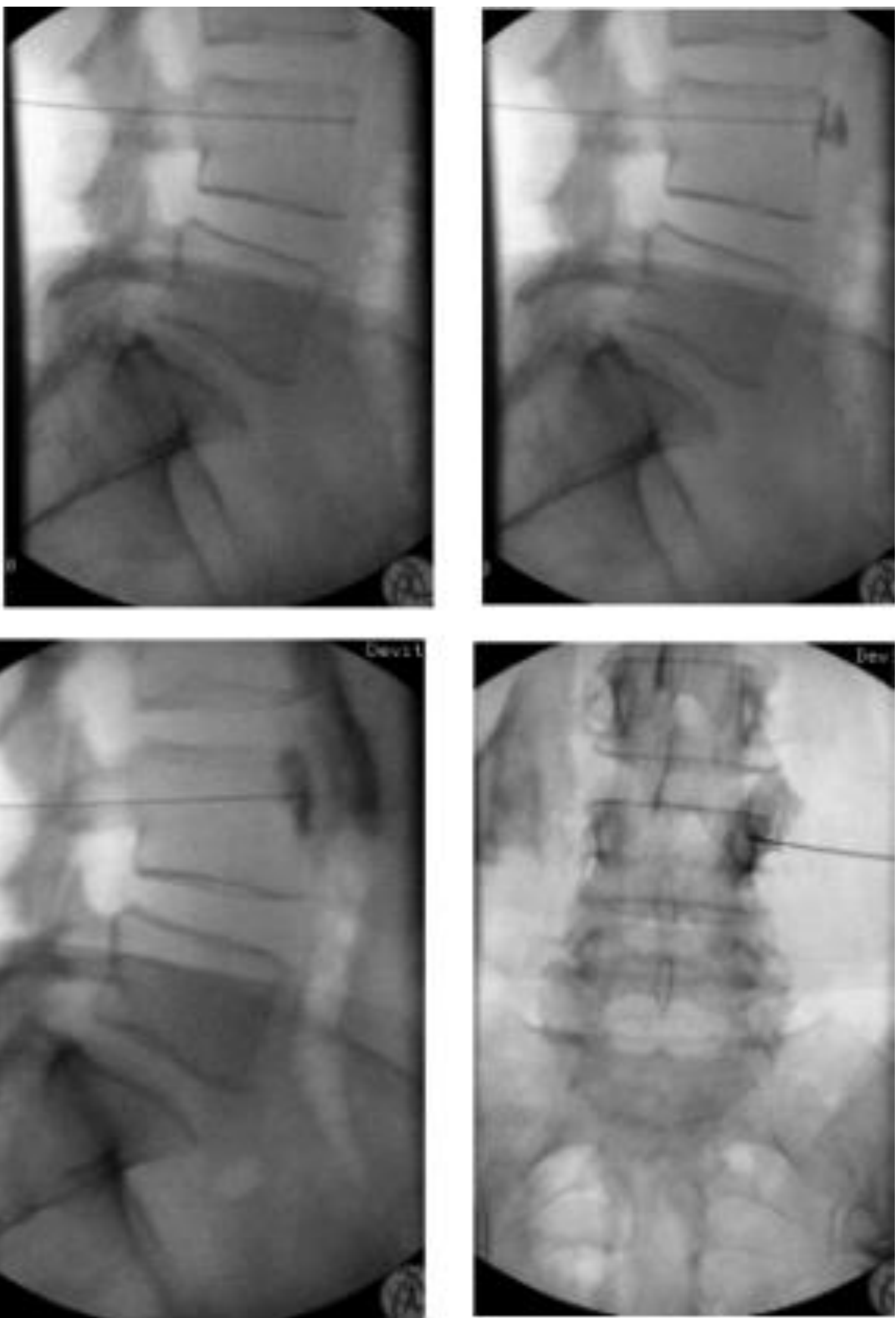
Lumbar sympathetic block may offer a meaningful improvement in pain and function for patients with erythromelalgia, particularly when standard treatments are ineffective.

It should be considered early in the treatment course for appropriately selected patients.



PROCEDURE

The left L4 vertebral body was identified using fluoroscopic guidance. On oblique view skin infiltration with 1% lidocaine was performed at the needle entry site. A 22 gauge, 5-inch spinal needle was advanced and the needle was placed anteriorly of the vertebral body under fluoroscopic guidance. No paresthesia was noted. The procedure was repeated on the right side. The needle tip position was confirmed using contrast agent and fluoroscopy (see below). A solution consisting of 3 ml. of 0.25% Bupivacaine with epinephrine 1:200000 was injected as a test dose, there was no change in the heart rate. 40 mg of kenalog was injected in each needle, followed by another 3 cc of 0.25% marcaine. After the procedure the needle was removed. No complications were noted.



CONCLUSION

This case underscores the potential utility of LSB in patients with erythromelalgia who have failed or cannot tolerate pharmacologic therapies. While evidence remains limited, existing literature supports sympathetic blocks as a therapeutic option in select cases of both primary and secondary erythromelalgia, including those associated with autoimmune disease.

