

BACKGROUND

Traditionally, lumbar sympathetic blocks are utilized for the treatment of a variety conditions resulting in chronic lower extremity pain, such as:

- ✦ Complex regional pain syndrome
- ✦ Phantom limb pain
- ✦ Pain of vascular insufficiency
- ✦ Post herpetic neuralgia

In this case, a patient with diabetic lumbosacral radiculoplexus neuropathy received a lumbar sympathetic block, which is not a standard treatment for this condition, with at least 3 months of significant pain reduction.

INTRODUCTION

Diabetic Lumbosacral Radiculoplexus Neuropathy (Diabetic Amyotrophy)

Symptoms

- Typically, unilateral lower extremity
- Neuropathic pain, weakness, and paresthesia consistent with femoral and/or obturator nerve distribution

Etiology

- Affecting <1% of diabetic patients
- Diagnosed with electromyography (EMG)

Treatment

- Conservative medical management
- Limited treatment options for refractory pain

CASE STUDY

A 58-year-old female with history of T2DM, was admitted to the hospital in September 2022 with right-sided weakness and foot drop, which progressed bilaterally.

- ✦ EMG confirmed bilateral Diabetic Amyotrophy
- ✦ After 2 weeks, discharged to an Acute Rehabilitation
- ✦ Despite medications and rehabilitation, she had minimal improvement in pain levels and weakness

In December of 2022, she presented to pain clinic.

Chief complaint

- ✦ Bilateral leg pain and weakness, left greater than right

On physical exam strength:

- ✦ 1/5 in bilateral knee extensors
- ✦ 0/5 in bilateral dorsiflexors and extensor hallucis longus
- ✦ Severe bilateral lower extremity allodynia

In February 2023, we proceeded with a right L3 lumbar sympathetic block, (Figure 1).

- ✦ Fluoroscope guided
- ✦ Omni Paque 180 confirmed needle placement
- ✦ 10mL of 0.25% of bupivacaine injected
- ✦ The procedure was well tolerated without complications

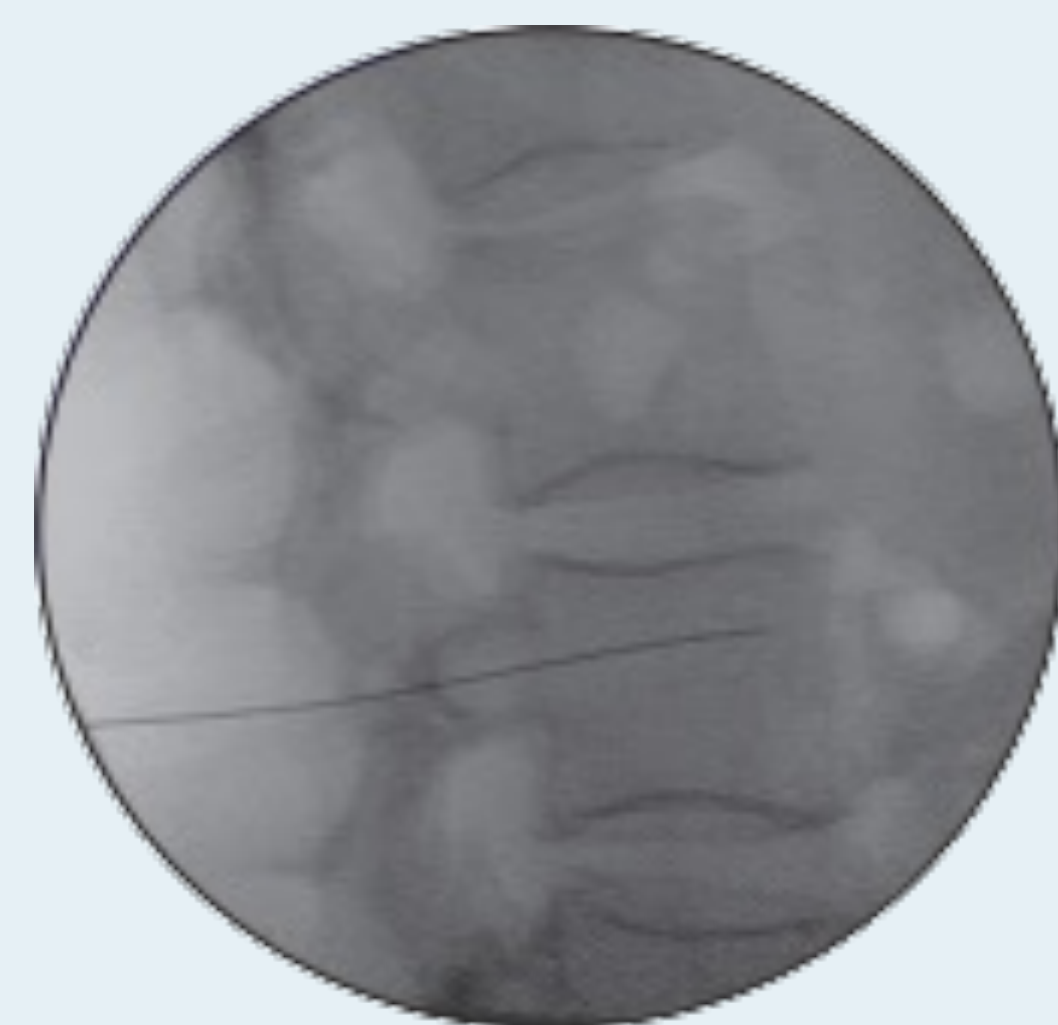
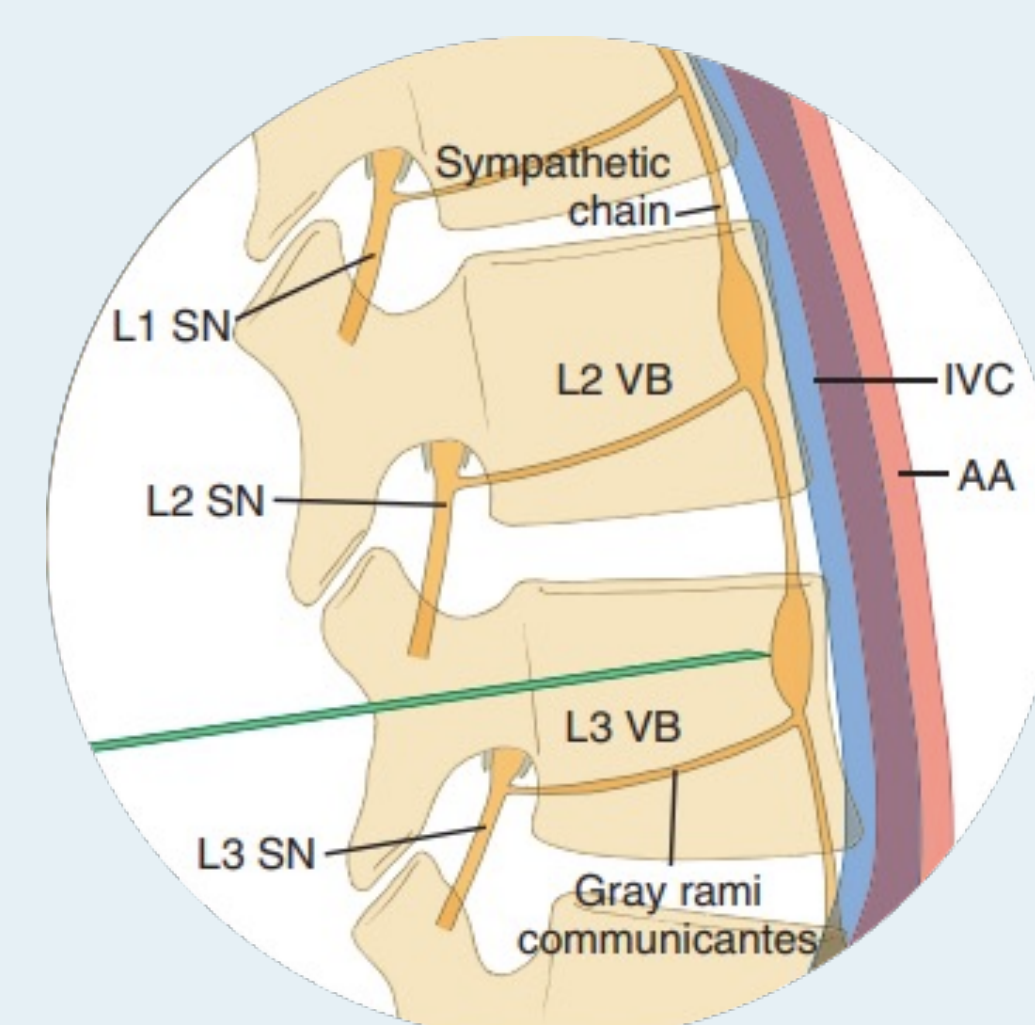


Figure 1. Left: Fluoroscopic view of ideal needle position for sympathetic block. Right: Anatomical vessel position related to ideal needle placement for sympathetic block.



RESULTS

At her 3 month follow up visit after the right L3 block

- ✦ She reported a 70% reduction in RLE pain
- ✦ Left lower extremity pain was unchanged

On physical exam strength was:

- ✦ 5-/5 bilateral hip flexors and knee extensors
- ✦ 3/5 bilateral distal musculature

A decision was made to repeat the sympathetic block on the left side.

At her 2 month follow up, after the left L3 block

- ✦ She reported a 70% improvement in LLE pain
- ✦ Muscle strength at that visit remained unchanged from her prior visit.

CONCLUSION

Lumbar sympathetic blocks in this case provided significant reduction in this patient's pain due to diabetic lumbosacral radiculoplexus neuropathy.

Future studies may be beneficial to look at the efficacy of this treatment for diabetic amyotrophy.

REFERENCES

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