When Lumbar Pathology Is Not The Pain Generator: Superior Cluneal Nerve Block For Chronic Lower Back Pain

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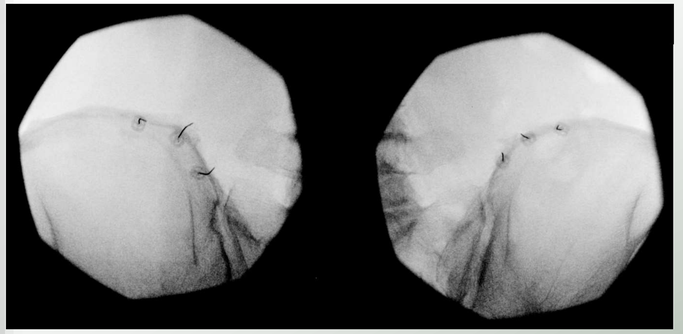
Introduction

- Superior cluneal neuralgia (SCNa) is an underdiagnosed cause of chronic low back pain, accounting for **up to 14% of cases.**
- Superior Cluneal Nerve **(SCN) branches from L1–L3 can become compressed proximally due to spinal stenosis**, producing referred buttock and lower extremity pain termed "pseudo-sciatica."
- We present a case of presumed bilateral neurogenic claudication with only transient ESI (epidural steroid injection) response that **achieved prolonged relief with bilateral SCN blocks**.

Case Description

- A 74-year-old man with history of hypertension and hepatitis C presented with **4–5 years** of chronic **low back pain radiating to the bilateral anterior thighs**. Pain worsened by walking, standing, and lumbar extension.
- MRI demonstrated multilevel **degenerative spondylosis**, most notable at **L2-3** where severe central canal stenosis was noted with cephalad buckling of nerve roots, as well as **severe bilateral neuroforaminal stenosis**.
- Prior Interventions:
  - Bilateral **L3–L5** medial branch radiofrequency ablation **(RFA)** = >50% relief for < 3 months.
  - Left **L3-4** paramedian interlaminar **ESI** = 100% relief but lasted only 2 days.
- Pain persisted, axial in nature and focal tenderness near the iliac crest, SCNa was then considered
- Bilateral SCN blocks performed under fluoroscopy.





Results

- At **8-week follow-up**, Patient reported **95% relief** of low back and lower-extremity symptoms. Pain relief was reported by the patient **for a total of 10-11 weeks after SCN block**.
- Patient reported **significant improvement** in pain with walking, standing, and lumbar extension
- With subsequent symptom recurrence, spine surgery considered microscopic medial facetectomy and laminotomy, while repeat bilateral SCN blocks were planned as a bridge to surgical management.

Discussion

- The **markedly longer response to SCN blockade** compared with ESIs supported SCNa as a predominant pain generator despite significant L2-3 central canal and neuroforaminal stenosis.
- The differential response to ESI versus SCN block was diagnostically and therapeutically informative in this case. It also helped **improve the patient's mood and daily life.**

Conclusion

- This case demonstrates that **SCNa can mimic spinal stenosis with neurogenic claudication**, and that **SCN block may benefit centrally mediated spinal pain**.
- **SCN block should be considered an alternative target in patients with apparent spinal stenosis with neurogenic claudication** refractory to epidural injections, particularly with posterior iliac crest tenderness.



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