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# Ultrasound Guided Retrolaminar Block for Cervical Radiculopathy A safer alternative- Case series.

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## INTRODUCTION

- Interventional treatment like epidural steroid injection (ESI) often being used for pain due to disc herniation or spinal stenosis and facet joint injection for facet degeneration.
- Proximity of spinal cord during these procedures heightens concerns about safety of cervical interventions
- An ultrasound-guided retrolaminar block (RLB) can be a safer alternative to ESI for managing cervical radicular pain. This technique involves injecting the drug behind the lamina, potentially reducing the risks associated with ESIs.

## CASE SERIES

- Retrospective case series of 5 patients with cervical radiculopathy.
- Inclusions: Adult patients (30 to 60 years), diagnosed with cervical radiculopathy, who did not respond to conservative treatments for at least 6 weeks.
- Ultrasound guided RLB was performed in prone position with neck flexed
- Transducer placed in transverse position initially to identify transverse process of C7 followed by upward vertebrae identification and made paramedian.
- A 22-G Sonoplex needle was inserted in-plane to probe in caudal to cranial direction. The needle tip was kept in close proximity to target cervical lamina.
- RLB was given with a mixture of 0.1% Ropivacaine of volume 6 ml and Methylprednisolone (40mg).
- Post procedure pain score was observed using numerical rating scale (NRS).
- A 48 hours follow-up for pain score was done telephonically to all five patients.

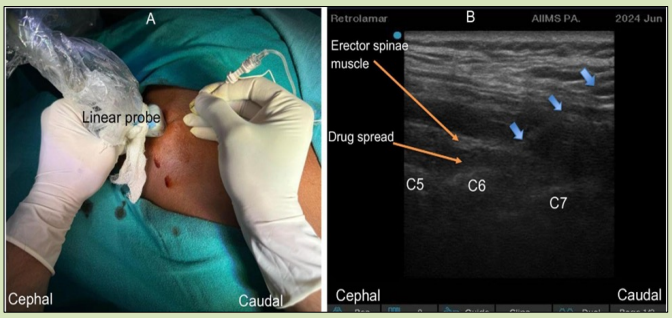


**Figure1: (A) RLB probe and needle position (B) Sono anatomy of RLB**

## RESULTS

- The mean NRS score decreased from 6.40 ± 1.14 pre-procedure to 4.80 ± 0.83 at 1 hour, 3.20 ± 1.10 at 24 hours, and 3 ± 1.12 at 48 hours post-procedure ($p < 0.001$).
- Repeated measure ANOVA indicated clinically and statistically significant pain reduction immediately post-procedure ($p = 0.035$), at 24 hours ($p = 0.003$), and at 48 hours ($p = 0.003$) compared to pre-procedure values.

## CONCLUSION

- The Ultrasound guided RLB can be a safe and effective alternative to cervical epidural steroid injections for the management cervical radicular pain

## REFERENCE

Khashan M, de Santiago J, Pardo I, Regev G, Ophir D, Salame K, et al. Ultrasound-guided Cervical Retro-laminar Block for Cervical Radicular Pain: A Comparative Analysis. Spine. 2022 Oct 1;47(19):1351–6