

Pain from cervical radiculopathy effectively treated with ultrasound-guided erector spinae plane block in a complex patient



PRESENTER:
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PRESENTATION

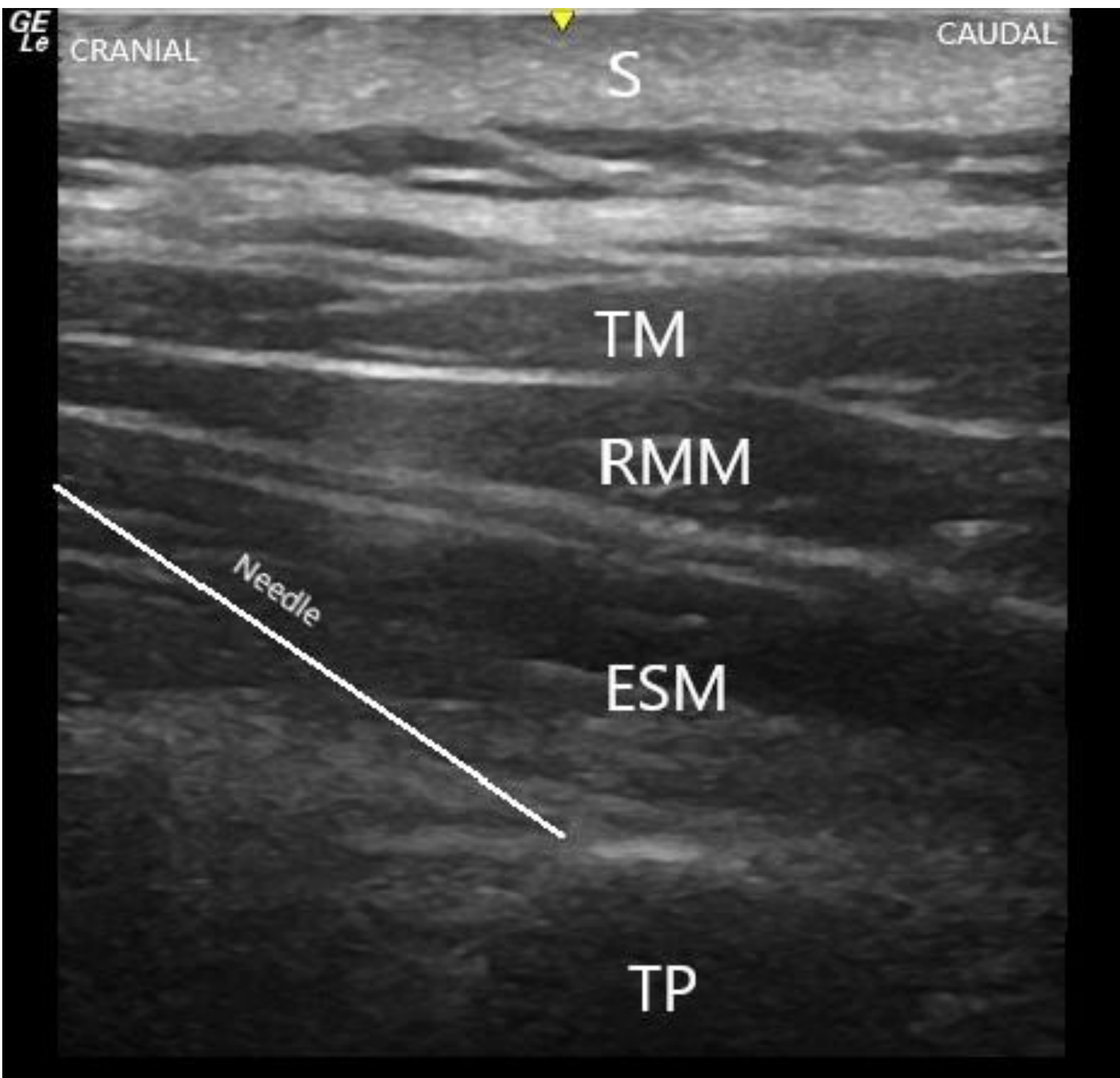
- Young adult male patient with multiple comorbidities presents to chronic pain clinic for 6 months of pain in a right, C7 dermatomal distribution.
- Multiple comorbidities complicate treatment, notably cerebral palsy, spasticity, nonverbal status, and uncontrolled involuntary movements of neck and upper extremity.
- Patient's left arm is significantly spastic, so the pain in his right arm causes significant functional impairment and reduction in quality of life.

WORKUP

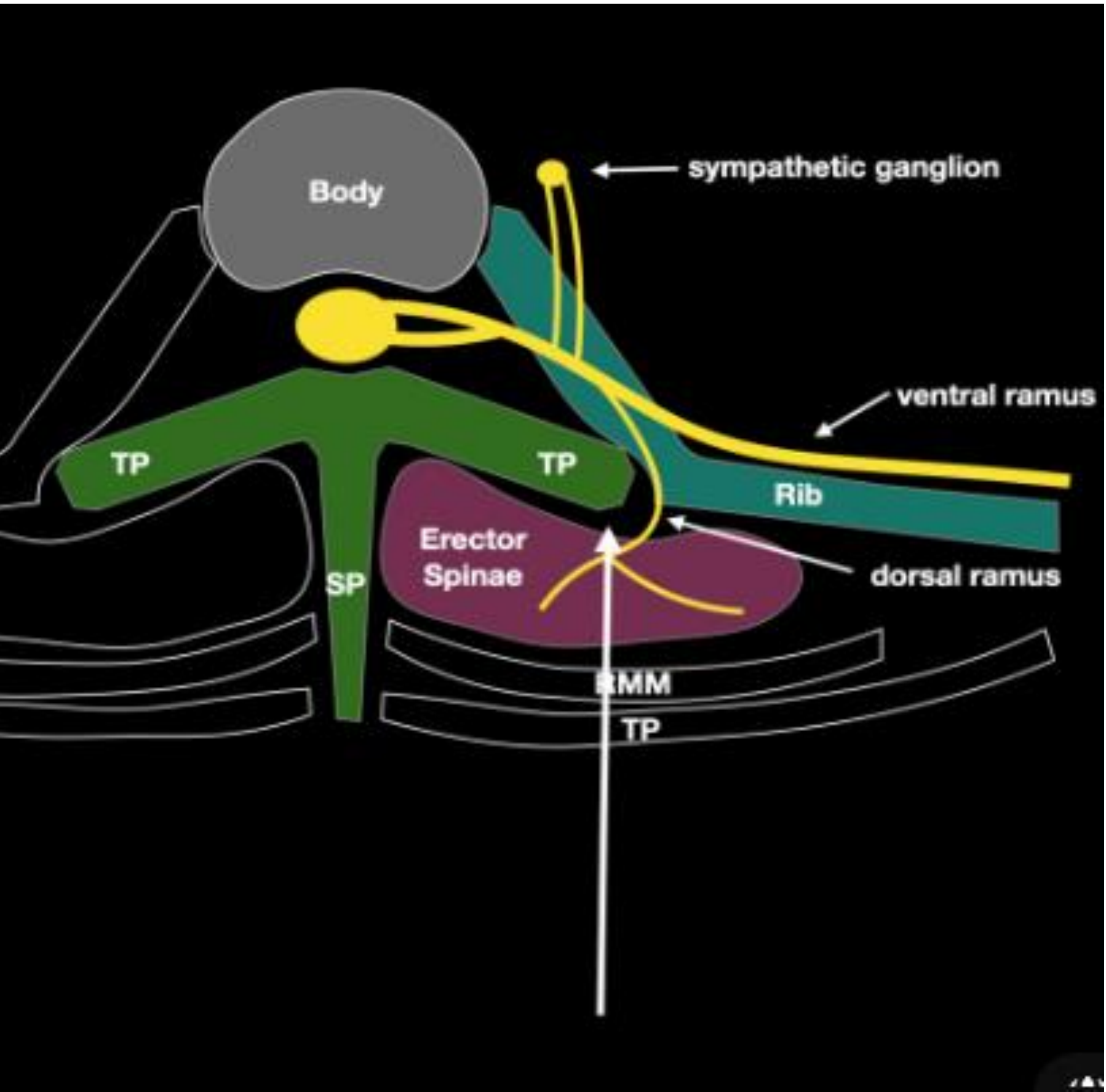
- MRI of cervical spine performed under sedation (due to uncontrolled movements of upper extremity) confirmed multilevel cervical spine degeneration and severe foraminal stenosis at C5-6 and C6-7 on the right.

TREATMENT

- A high-volume erector spinae plane block (containing saline and dexamethasone) was performed at the right T1-2 level, expecting local spread to the nearby stenotic neural foramen.



An erector spinae plane block provides pain relief for a patient with radiculopathy unable to undergo epidural steroid injection.



DISCUSSION

- Cervical epidural steroid injection performed under sedation may be associated with increased risk for cord injury.
- It has been demonstrated that a thoracic erector spinae plane block has the potential for significant spread, even into the neural foramen several levels adjacent to injection.
- In rare cases and special populations, an alternative to fluoroscopic interlaminar epidural steroid injection in the cervical spine may be required. The outcome for our patient suggests an erector spinae plane block may be one option.

RESULTS

- Two weeks following injection patient reported excellent pain relief and no complications. Following the injection, he reported no longer needing to use his as-needed doses of oxycodone.
- Several months later patient returned to clinic to have the procedure repeated.

REFERENCES

- Hodges, S., Castleberg, R., Miller, T., Ward, R., & Thornburg, C. (1998). Cervical Epidural Steroid Injection With Intrinsic Spinal Cord Damage: Two Case Reports. *Spine*, 23, 2137–2140. <https://doi.org/10.1097/00007632-199810010-00020>.
- Sørenstua, M., Zantalis, N., Raeder, J., Vamnes, J., & Leonardsen, A. (2022). Spread of local anesthetics after erector spinae plane block: an MRI study in healthy volunteers. *Regional Anesthesia & Pain Medicine*, 48, 74 - 79. <https://doi.org/10.1136/rapm-2022-104012>.
- <https://www.acepnow.com/article/how-to-perform-an-erector-spinae-plane-block/?singlepage=1>

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