

Spinal Cord Injury Following Cervical Epidural Steroid Injection Under Sedation

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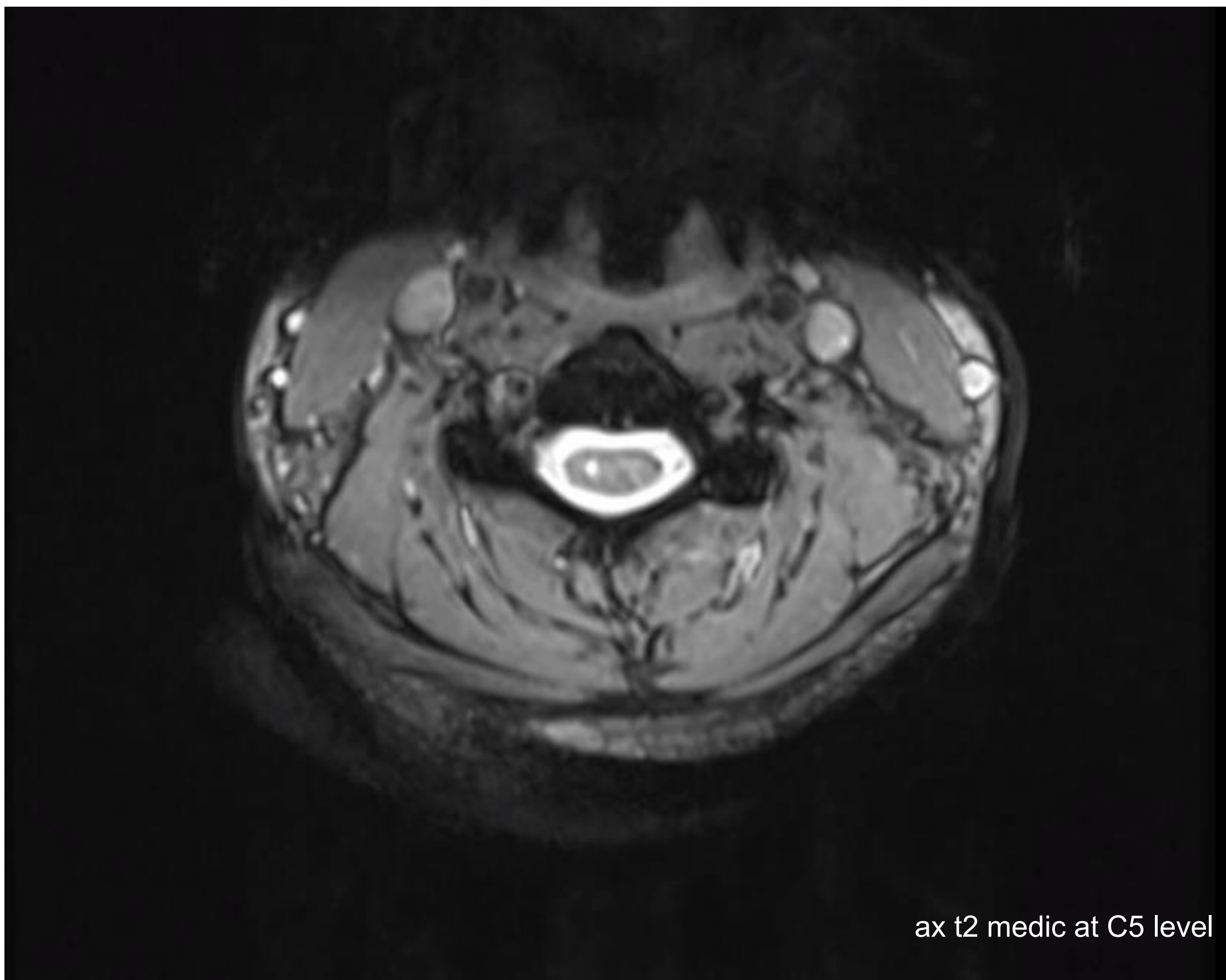
Background

- Chronic neck pain can be a debilitating condition with negative impacts on quality of life.
- A variety of etiologies exist for chronic neck pain, with g cervical disc herniations with possible radiculopathies from a variety of acute vs chronic injuries being common.
- While definitive treatment of disc herniation may include surgical management, many patients' elective for more conservative therapies, such as a cervical epidural steroid injection.

Patient Presentation and Treatment

- The patient is an otherwise healthy 26-year-old female who presented to an outside pain clinic with severe and persistent neck pain following a motor vehicle crash 2 years prior.
- Elected for an interlaminar epidural steroid injection (ICESI) under sedation.
- When awakening in PACU following this procedure patient had 10/10 pain in her right arm with inability to move it.
- She also had issues with respiration prompting intubation, ICU stay and high dose steroid treatment with STAT MRI.
- Thankfully, her strength partially recovered but she now suffered from radicular symptoms. She presented to our clinic for a second opinion and imaging on treatment options for this.
- Patient considering PNS stimulator vs stellate ganglion block vs surgical intervention for ongoing nerve pain while continuing medical management.

T2 weighted Imaging of Cervicothoracic Spine



Discussion

- While an epidural steroid injection may be considered a routine procedure, careful considerations must be made to reduce the risk of complications.
- Quantification of these events by the American Society of Anesthesiologists closed claim database suggests that the most common procedure-related event is direct needle trauma to a nerve or the spinal cord at 31%; and most of these events also occur in patients who receive general anesthesia or sedation at 67%.
- As with all interventional procedures, ensuring all patients understands the risks, benefits and has appropriate expectations for sensations during the case to both improve patient satisfaction and safety.
- Avoiding sedation in cases involving the cervical spine may help reduce risk of these types of injuries occurring and should be considered for any CESI based on the closed claims data.

References

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