

Labor Analgesia In A Patient With Resolved Transverse Myelitis

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Introduction

Transverse myelitis (TM) is a rare, acquired focal inflammatory disorder of the spinal cord, characterized by rapid onset weakness, sensory deficits, and bowel/bladder dysfunction.

While occurrences of transverse myelitis are infrequent in the general population, its incidence among pregnant women is even rarer. Additionally, transverse myelitis has been linked to spinal and epidural anesthesia, further complicating its clinical landscape.

Understanding the unique challenges posed by transverse myelitis in pregnancy and its potential association with anesthesia is crucial for effective management and care delivery.

Herein, we present a case of transverse myelitis (TM) in a pregnant woman, emphasizing our approach to management and care.

Case Background

Patient Profile:

29 yo F, Gravida: 1, Para: 0, BMI: 56

Presenting Condition:

39 weeks gestation for Induction of Labor

PMH: 3 years prior, the patient experienced a flu-like illness followed by the sudden onset of symptoms including:

- Bilateral lower limb weakness
- Urinary retention
- Burning sensation from T6 downwards
- Intermittent horizontal diplopia
- Altered sensation in the trunk and inner thighs

Treatment:

- Methylprednisolone with complete recovery after one week

Patient Presentation

Neurological Status: No residual neurological sequelae noted on presentation.

Neurology Consultation: Highlighted the increased risk of transverse myelitis recurrence with neuraxial anesthesia.

Patient Consent: Obtained after explanation of risks.

Procedure and Analgesia:

- Dural Puncture Epidural (DPE): Performed for labor analgesia.
- Analgesic Solution: 0.0625% Bupivacaine with Fentanyl used for labor analgesia.

Delivery:

- Mode of Delivery: Cesarean section due to failed IOL
 - Epidural utilized for surgical anesthesia with 10cc of 2% Lidocaine
- Postpartum Recovery: Patient recovered uneventfully without postpartum complications.

Transverse Myelitis

Focal inflammatory disorder of the spinal cord
Etiology includes para-infectious and autoimmune conditions such as multiple sclerosis, neuromyelitis optica, SLE, Sjogren's Syndrome, and sarcoidosis

Anesthesia Considerations

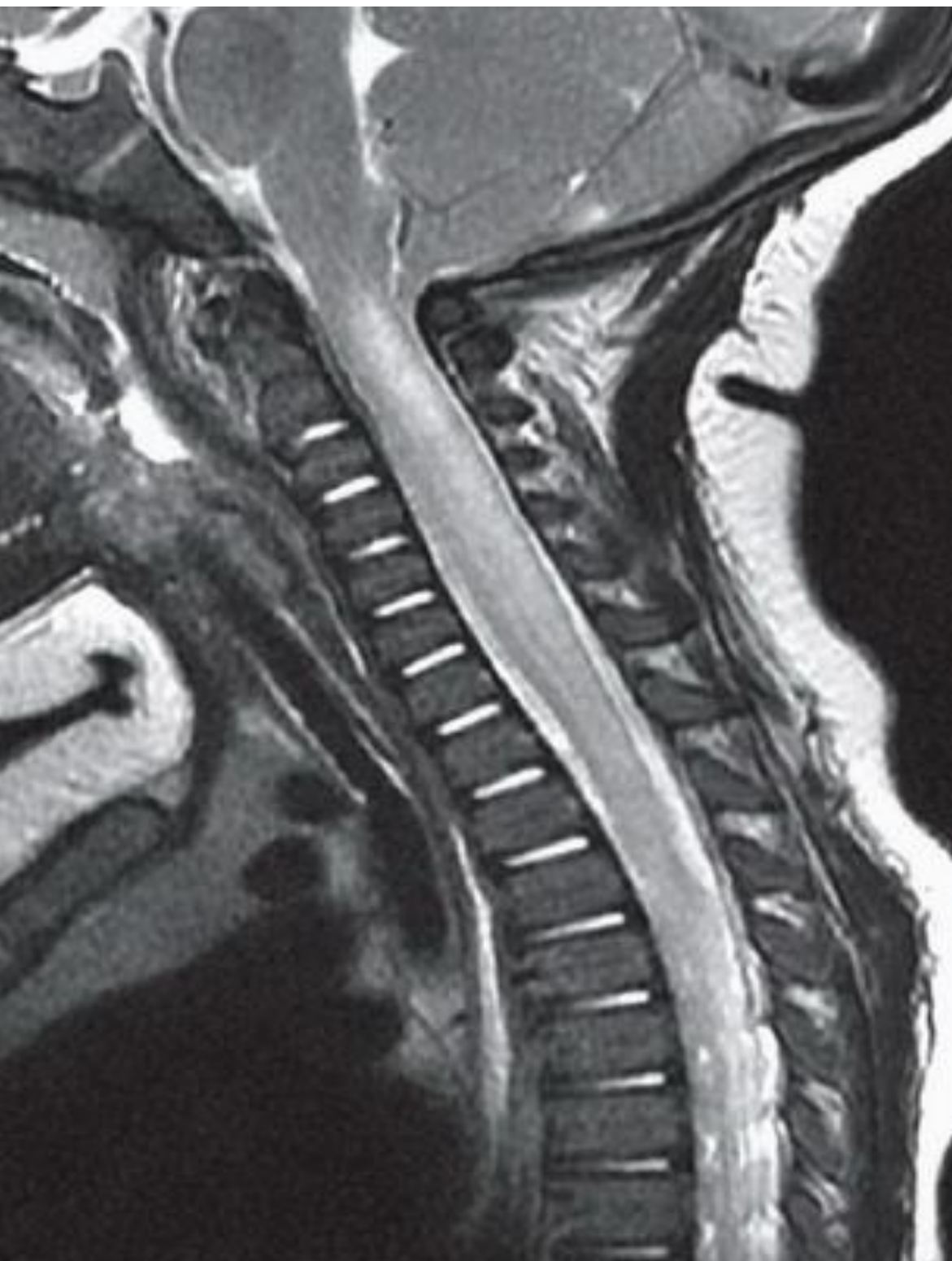
Spinal and epidural anesthesia can cause or trigger transverse myelitis
Despite increased risk, neuraxial anesthesia was preferred in this case due to:

- Elevated BMI (56) and potential difficult airway
 - Risks associated with IV analgesia or anesthesia, including sedation, airway compromise, and fetal concerns
 - Patient's understanding of risks and benefits, and previous positive response to steroid treatment
 - No residual neurological sequelae present at presentation
- Autonomic Hyperreflexia
- Potential complication during labor and following neuraxial anesthesia
 - Vigilant monitoring and prompt management are essential to mitigate risks

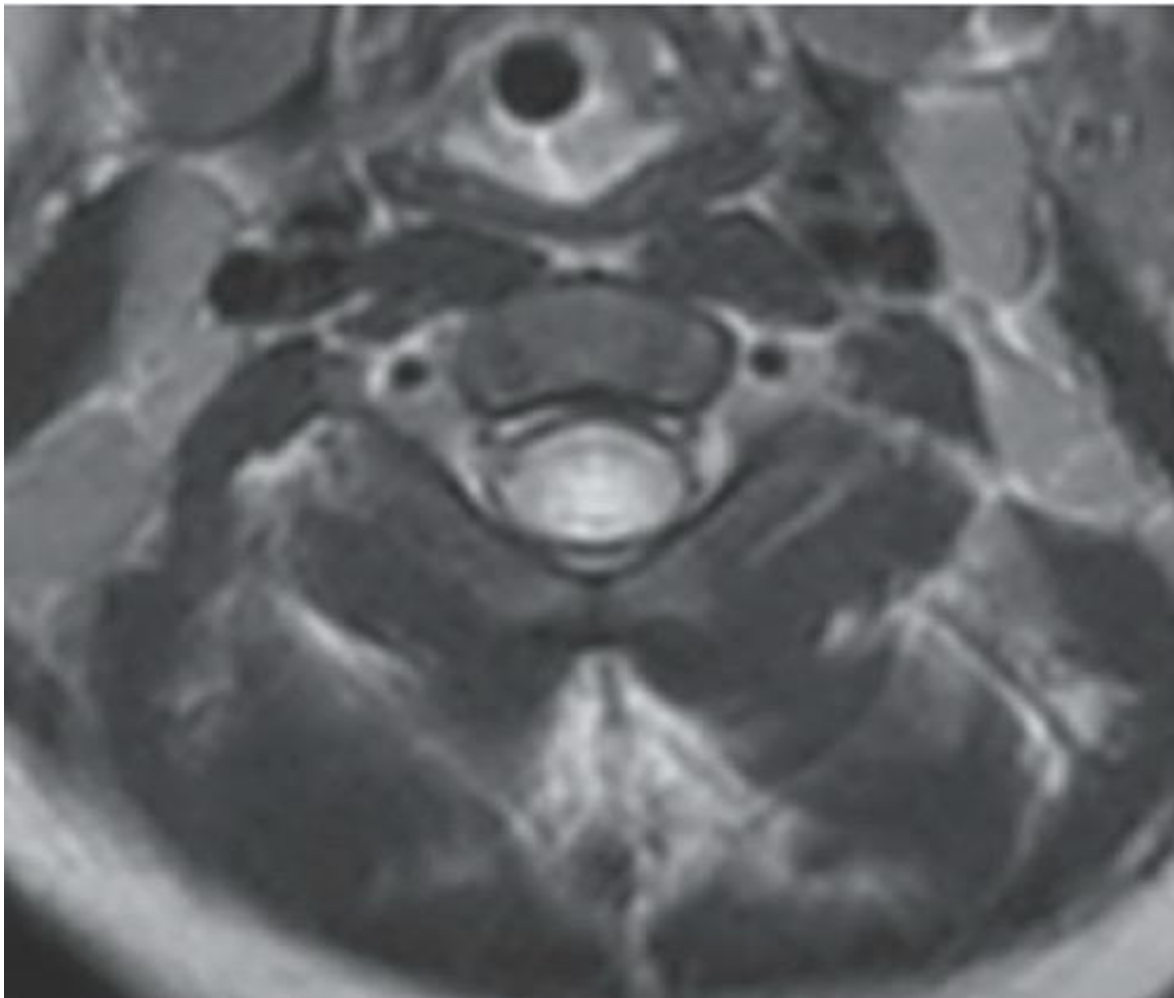
Diagnostic Imaging:

MRI: Severe longitudinal extensive spinal cord thickening and myelitis (LETM).

MRA: Involvement from C3 to the conus.



Sagittal T2WI: abnormally increased signal within the cervical and upper thoracic spinal cord



Axial T2WI: Increased signal involving the entire cross-sectional area of the cord, difficult to distinguish from the surrounding CSF

Conclusion

Judicious use of neuraxial anesthesia is warranted in patients with a history of transverse myelitis.

Close monitoring is crucial for detecting and managing complications such as autonomic hyperreflexia.

References

- Pregnancy in patients with pre-existing transverse myelitis. Obstet Gynecol. 1996; 87: 809-812
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