Case Report: Cauda equina syndrome due to a herniated lumbar vertebral disc, following vaginal delivery with labour epidural analgesia

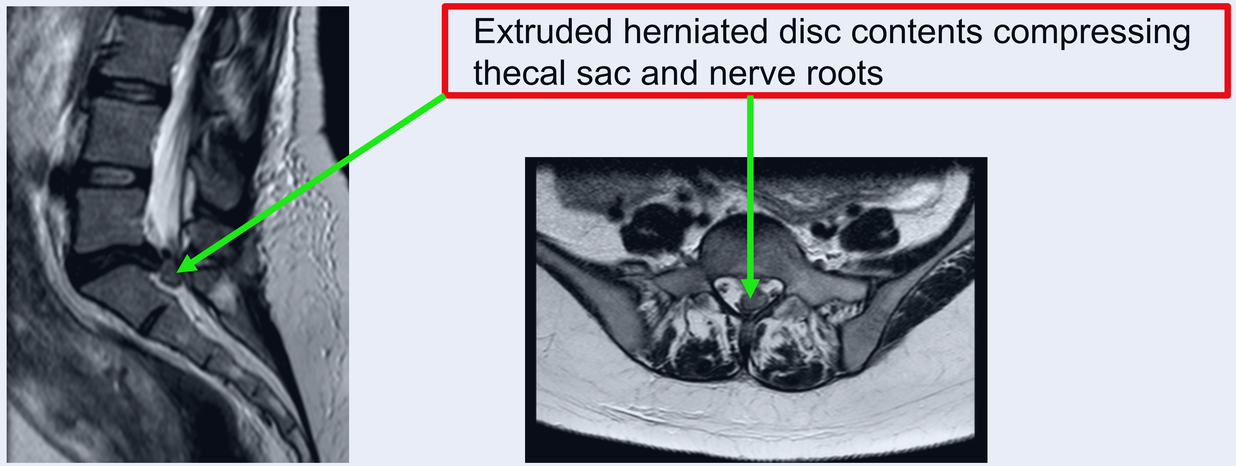
J Lloyd, H Wilson, C Prior, R Patel

West Middlesex University Hospital, Chelsea and Westminster NHS Trust, London, UK

West Middlesex University Hospital

KEY POINTS:

- *Vertebral disc herniation is a rare but recognised cause of peripartum cauda equina syndrome*
- *Labour is associated with deterioration of herniated disc pathology and symptoms may be masked by epidural analgesia*



Case Report

- 25 year old G1P0, induction and augmentation of labour under epidural labour analgesia.
- Symptoms of left sided sciatica for several days prior to induction.
- Spontaneous vaginal delivery with second degree tear.
- Reduced lower limb power (left worse than right) reported on day 3 postpartum, with reduced perianal sensation and upward plantar reflexes bilaterally.
- Urgent lumbar MRI revealed an L5-S1 disc bulge, significant compression of the nerve roots exiting below and compression of the left S1 root (see images).
- Urgent transfer to local neurosurgical centre for surgical decompression.
- Good functional recovery post laminectomy.

Discussion

- While lower back pain is common in pregnancy, symptomatic disc herniation is rare (1:10,000) [1].
- This case report adds to the evidence of an association between labour and deterioration of herniated disc pathology.
- Caesarean delivery has been associated with a lower risk of cauda equina syndrome secondary to disc herniation compared with vaginal delivery [1].
- Epidural analgesia may mask symptoms of worsening nerve root compression during labour; patients with pre-existing symptomatic disc herniation should be consented accordingly and meticulous care with positioning is advised.
- The importance of robust postpartum neurological monitoring and timely neurosurgical referral are reinforced [2].

References

1. Paslaru FG, Giovani A, Lancu G, Panaitescu A, Peltecu G, Gorgan RM. Methods of Delivery in Pregnant Women with Lumbar Disc Herniation: A Narrative Review of General Management and Case Report. Journal of Medicine and Life. 2020; 13: 517-22.
2. Yentis SM, Lucas DN, Brigante L et al. Safety guideline: neurological monitoring associated with obstetric neuraxial block. Anaesthesia. 2020; 75: 913-19.