

# 2 LEVEL ENDOSCOPIC LUMBAR DECOMPRESSION IN A CASE OF CAUDA EQUINA SYNDROME

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## INTRODUCTION

Cauda Equina Syndrome(CES) is an urgent condition that requires emergent attention. Lumbar Disc Herniation (LDH) is the most common cause amongst many other etiologies. Despite being rare, it may result in life-changing implications if not acted upon immediately when suspected. Red-flag warning signs are used for the treatment of this condition. The CES warning signs include 5 aspects: bilateral neurogenic sciatica, reduced perineal sensation, altered bladder function ultimately to painless urinary retention, loss of anal tone, and sexual dysfunction. Patients and doctors must pay attention to each of these 5 signs to allow early diagnosis of CES and urgent surgical decompression. There are many methods used for the treatment of CES, the most common method being surgical decompression.

### REPORT

We herein present a case of Cauda Equina Syndrome due to 2level Lumbar Disc Herniation in a 27-year-old Orthopaedic Nurse with a BMI of 45.5kg/m2.

- Patient presented with a 2-week history of worsening lower back pain(VAS 7) associated with bilateral lower limb radicular pain, sacral numbness, and loss of bowel continence, which limits her activities of daily living.3 years ago, the patient had a fall in sitting position, which resulted in back pain for 1 month but subsequently resolved, and no further medical attention was sought.
- Urgent MRI done revealed L3/4 central disc extrusion and L4/5 left paracentral disc extrusion, causing spinal stenosis and left L5/S1 traversing nerve roots compression.
- Following MRI, the patient consented to undergo an emergent minimally invasive decompression surgery; Percutaneous Endoscopic Lumbar Discectomy (PELD) of L3/4 and L4/5 levels via a Transforaminal Approach with the aid of Methylene Blue dye.
- Findings include a sequestered disc over the L3/4 level and a protruded disc over the L4/5 level. Posterior aspect of L3/4 and L4/5 discs removed until the extradural layer. No dural tear noted.
- Post operatively, lower limb radicular pain improved and noted improvement in sacral numbness. At 4 weeks postoperatively she was pain free, with restoration of bowel and bladder function. She has no recurrence at one year post operatively.

# CONCLUSION

Minimally invasive decompression is an effective approach for LDH with fewer complications compared to conventional laminectomy. In recent years, due to its rapid recovery, PELD has been accepted as one of the minimally invasive methods effective for the treatment of LDH and its use for cases with cauda equina syndrome despite being controversial is a possible option.



**Figure**: Sagittal Lumbosacral, Axial L4(above) and Axial L5(below) Disc cuts MRI images

#### REFERENCES

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