

## The Lack of Significant Recovery after Cauda Equina Syndrome Requires Thorough Follow-Up

*Josef Finsterer<sup>1</sup>, Fulvio A Scorza<sup>2</sup>, Carla A Scorza<sup>2</sup> and Antonio-Carlos G de Almeida<sup>3</sup>*

<sup>1</sup>MD, PhD Neurology & Neurophysiology Center, Vienna, Austria

<sup>2</sup>MD Disciplina de Neurociência. Universidade Federal de São Paulo/Escola Paulista de Medicina (UNIFESP/EPM). São Paulo, Brazil

<sup>3</sup>MD Centro de Neurociências e Saúde da Mulher “Professor Geraldo Rodrigues de Lima.” Escola Paulista de Medicina/Universidade Federal de São Paulo (EPM/UNIFESP), São Paulo, Brazil

### Corresponding Author

*Josef Finsterer*

MD, PhD Neurology &  
Neurophysiology Center, Vienna,  
Austria

### Letter to the Editor:

We read with interest the article by Rai et al. on a 38-year-old male with a dislocated disc herniation L2/3, clinically manifesting as cauda equina syndrome (CES) with lumbar, radicular pain, paraparesis, sensory disturbances, and urinary retention and inability to defecate, with onset four months prior to presentation [Rai, A. et al., 2023]. After the laminectomy, the sensory disturbances improved, but the motor deficits recovered only slightly [Rai, A. et al., 2023]. This has been attributed to the long latency between symptom onset and decompressive surgery [Rai, A. et al., 2023]. The study is excellent but has limitations that should be discussed

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The major limitation is that no follow-up imaging was performed. Since the outcome was poor, it would have been imperative to repeat the lumbar MRI to see if there was recurrent prolapse, incomplete discectomy, discitis, radiculitis, disc herniation in another segment, postoperative vertebral stenosis, hematoma, or spinal stroke. Preferably, the follow-up MRI should be performed with contrast medium. There is also a need to report the results of blood tests, especially inflammation and coagulation parameters, at the last check-up. It is also conceivable that vertebral stenosis over a period of four months led to a spinal stroke.

Another limitation is that no explanation was provided as to why the urinary problems worsened after surgery. Before the operation, the patient had difficulty initiating urination, but postoperatively,

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the patient suffered from urinary incontinence. What is the explanation for this deterioration? Was the incontinence due to sphincter weakness or overactivity of the detrusor muscle? Has an urodynamic examination been carried out?

A third limitation is that pain course, quality, and intensity, were not specified. We should know the visual analogue score (VAS) at pain onset and progression, the quality of pain, and the type of therapy that was most effective. Of particular interest is whether the pain persisted or recurred after surgery.

A fourth limitation is that it does not explain why it took four months for the patient to seek professional help. He was described as having paraparesis, severe lower back pain during 2 hours, difficulty inducing urination, and inability to defecate [Rai, A. et al., 2023]. It is quite unlikely that these symptoms lasted during four months. A four-month inability to defecate would have resulted in death. What happened to the symptoms in the four months before the operation? Have they improved, worsened, remained the same, or have they disappeared? Therefore, the course of these symptoms should be reported in detail. It should be explained why the comprehensive diagnostics were not started earlier.

A fifth limitation is that there is no mention of impaired sexual functioning due to CES. In particular, we should know whether there was impotentia coeundi or generandi, or both.

There is a discrepancy between the history (inability to defecate) and clinical neurological examination (normal anal tone on digital examination). How can this discrepancy be explained? There is also a discrepancy between the discussion (back pain was moderate) and the case description (back pain was severe) [Rai, A. et al., 2023]. How can this discrepancy be explained?

Overall, the interesting study has limitations which challenge the results and their interpretation. Addressing these limitations could further strengthen and reinforce the statement of the study. If there is no significant recovery after CES, thorough follow-up should be required.

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### Author Contribution:

(1. Research project: A. Conception, B. Organization, C. Execution; 2. Statistical Analysis: A. Design, B. Execution, C. Review and Critique; 3. Manuscript: A. Writing of the first draft, B. Review and Critique): author JF: 1A, 1B, 1C, 3A, 3B.

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