

Reviewer #1:

Scientific Quality: Grade D (Fair)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: This paper reported a case of a 77-year-old woman with L2/3 and L3/4 lateral recess stenosis underwent microlaminectomy, foraminal decompression, and disk height restoration using an IntraSPINE® device. A tiny incident durotomy occurred intraoperatively and was sealed using DuraSeal™. However, decreased muscle power, urinary incontinence, and absence of anal reflex were observed postoperatively. Emergent magnetic resonance imaging revealed fluid collection, causing thecal sac indentation, and central canal compression. Surgical exploration revealed that the gel-like DuraSeal™ had entrapped the hematoma and, consequently, compressed the thecal sac and nerve roots. The DuraSeal™ was removed and the nerve root was exposed. However, neurological function did not recover postoperatively. Generally, this is a rare case study. There are a few concerns that need to be clarified: a

1. It was hard to differentiate that the neurological dysfunction was from intraoperatively decompression and disk height restoration using an IntraSPINE® device or from the DuraSeal™ expansion. It's better to provide some more evidence, such as photos during surgical exploration.

➔ Thank you for this suggestion. I agree that it is difficult to differentiate the origin of neurologic dysfunction. However, if the neurological dysfunction was caused by intraoperative decompression and disk height restoration using an IntraSPINE® device, the patient's motor dysfunction would have occurred immediately after the operation, instead of 2 days postoperatively. This was a retrospective case report. Unfortunately, we did not take photographs intraoperatively. Because this was an emergent surgery, we did not record the intraoperative image before we removed the DuraSeal™ gel-like debris.

2. The Figure 2 didn't support that the neurological dysfunction was from DuraSeal™ expansion.

➔ Thank you for your comment. We have added more images to Figure 2. As shown, the regional fluid collection at the surgical bed protrudes anteriorly at the junction of L2 and L3, toward the L4 level. The theca sac was compressed by Duraseal™, which was hyperdense in the T2 phase in MRI. The patient was diagnosed with cauda equina syndrome (CES). Neurological dysfunction is sometimes diagnosed based on disease progression, rather than just imaging findings. The patient's muscle power status was reduced 2 days post-operatively rather than immediately after spine

surgery. These symptoms were consistent with those of cauda equina syndrome. However, although we immediately arranged the MRI and decompression surgery, neurological impairment still occurred.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: The content of this study is a case report of cauda equina syndrome caused by the application of DuraSeal™ in microlaminotomy. The research content of this paper is representative to a certain extent, suggesting that we should pay attention to the possibility of causing cauda equina syndrome when using such substances. However, the following problems still need to be solved:

1. Enhance the accuracy of English expression.

➔ Thank you for this suggestion. We have sent the manuscript for English language editing.

2. Provide a sagittal sequence in Fig 2.

➔ Thank you for this suggestion. We have provided the sagittal sequence.

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

➔ Thank you for your suggestion. We have revised the figures accordingly.

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➔ Thank you for your comment.

Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript.

➔ Thank you for your comment. We will emphasize the highlights of our research.

To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more

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➔ Thank you for this advice.