

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 78783

Title: Cauda equina syndrome caused by the application of DuraSeal™ before microlaminectomy: A case report

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03028106

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Taiwan

Manuscript submission date: 2022-07-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-07-15 23:32

Reviewer performed review: 2022-07-19 15:05

Review time: 3 Days and 15 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Peer-reviewer statements	Peer-Review: [<input checked="" type="radio"/>] Anonymous [<input type="radio"/>] Onymous Conflicts-of-Interest: [<input type="radio"/>] Yes [<input checked="" type="radio"/>] No
-------------------------------------	---

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; 2. Provide a sagittal sequence in Fig 2.

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 78783

Title: Cauda equina syndrome caused by the application of DuraSeal™ before microlaminectomy: A case report

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03518978

Position: Peer Reviewer

Academic degree: MD

Professional title: Associate Professor

Reviewer's Country/Territory: United States

Author's Country/Territory: Taiwan

Manuscript submission date: 2022-07-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-08-01 18:57

Reviewer performed review: 2022-08-09 17:41

Review time: 7 Days and 22 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Peer-reviewer statements	Peer-Review: [<input checked="" type="radio"/>] Anonymous [<input type="radio"/>] Onymous Conflicts-of-Interest: [<input type="radio"/>] Yes [<input checked="" type="radio"/>] No
-------------------------------------	---

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