

# Technical note: unilateral hemilaminotomy for intradural lesions (UHIL)

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## Clinical vignette

The authors report on a case of a 38-year-old female presenting with progressive cervical myelopathy, including gait and balance dysfunction and limb paraesthesia over a 2-year time period. Imaging revealed a C3 intradural lesion consistent with a meningioma. The lesion was located to the left of midline, causing significant cord compression with signal change on T2WI MRI. Surgical removal of the lesion was recommended as the treatment of choice. Options for canal access were discussed including a standard laminectomy with removal of the midline structures including spinous process and bilateral lamina, versus a unilateral laminotomy and sparing of the contralateral muscle and spinous process. The unilateral approach was preferred and performed for removal of the lesion, and documented in the presented video.

## Technical note (Figure 1)

Following anaesthesia and positioning prone with Mayfield 3-pin head fixation, an incision was performed slightly to the left of midline. A unilateral muscle strip dissection was performed with insertion of a Versa-Trac retractor system for unilateral exposure of the lamina. A laminotomy was performed on the left side with sparing of the spinous process. Enough lamina on the approach side was removed to provide adequate access to the dura and spinal canal. A dural incision was performed to the left of midline. The meningioma was identified and micro-neurosurgical technique performed to remove the lesion. Progressive diathermy to shrink the lesion was done so that safe removal could be achieved with the narrow corridor of the



**Figure 1** Surgical work flow and technique (1).

Available online: <http://www.asvide.com/articles/1422>

unilateral exposure. Diathermy of the dural attachment was performed as per standard technique. Running suture of the dural incision and removal of the retractor was done with haemostasis and standard wound closure. The patient made a rapid recovery with discharge on day 3, with minimal wound pain most likely due to the unilateral exposure and maintenance of the midline spinous process tension band, stabilizing structures.

## Conclusions

The role of Unilateral Exposure for Bilateral Decompression (ULBD) has been shown to be of benefit in the lumbar spine for degenerative spinal canal stenosis, with benefits including reduced pain, reduced length of stay and overall improvements in patient satisfaction (2,3). The authors propose that the unilateral technique should also be utilized

for spinal oncology (4), such as the case presented here.

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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