

# Teaching NeuroImages: Spinal cord herniation after cervical corpectomy

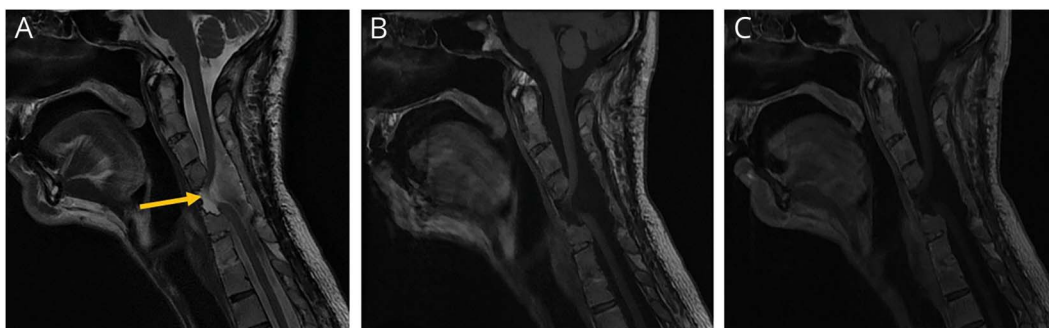
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## Figure Imaging



MRI shows spinal cord herniation into the C5 corpectomy defect ([A] sagittal T2-weighted image, [B] sagittal T1-weighted image without contrast, [C] sagittal T1-weighted image with contrast). Sagittal T2-weighted MRI shows herniation of the spinal cord anteriorly into the C5 corpectomy defect. There is marked thinning of the cervical cord at this level with abnormal T2 hyperintensity, compatible with myelomalacia (arrow in A). Precontrast and postcontrast T1-weighted images do not demonstrate any abnormal enhancement.

A 48-year-old man presented with worsening generalized pain. He had a history of complex cervical deformity and C2-T4 anterior and posterior instrumented fusions. On neurologic examination, cranial nerves, sensation, and strength were intact. Imaging demonstrated herniation of the spinal cord into the corpectomy defect and myelomalacia of the herniated cord (figure). Components of the patient's pain were attributed to myelomalacia. Spinal cord herniation (SCH), when iatrogenic, mostly occurs in the setting of posterior instrumentation and associated pseudomeningocele formation. SCH may also develop as a complication of anterior cervical decompression and underlying dural defect is the most likely mechanism.<sup>1,2</sup>

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## Author contributions

M. Guryildirim: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, study supervision. M. Kocak: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, study supervision. S.G. Dua: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval, intellectual input.

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## Disclosure

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## References

- Guppy KH, Silverthorn JW. Spinal cord herniation after cervical corpectomy with cerebrospinal fluid leak: case report and review of the literature. *World Neurosurg* 2017;100:711.e7–711.e12.
- Min JH, Jung BJ, Jang JS, Kim SK, Jung DJ, Lee SH. Spinal cord herniation after multilevel anterior cervical corpectomy and fusion for ossification of the posterior longitudinal ligament of the cervical spine. *J Neurosurg Spine* 2009;10:240–243.

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