

Resection of a Neuroenteric Cyst Using a Far Lateral Approach

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Abstract

This operative video highlights a rare case of a neuroenteric cyst at the ventral craniocervical junction. The case involved a 30-year-old man who initially presented 13 years earlier with acute onset of headache and visual changes. At that time, he was found to have a small, enhancing ventral intradural extramedullary mass at the rostral aspect of C1 thought to be a meningioma. The lesion was managed conservatively, and surveillance imaging tracked its slow progressive enlargement to a size of 1.4 cm (►Fig. 1A, B). Although he remained asymptomatic, nonurgent elective resection was recommended because of his age and mass progression. The patient underwent a left far lateral approach to the craniocervical junction for resection of the mass. This involved dissection of the suboccipital musculature to expose the C1 transverse process in the suboccipital triangle and ultimately the vertebral artery. After a small craniectomy and C1 hemilaminectomy, the dura was opened and a cystic lesion encountered (►Fig. 2). The cystic contents were debulked and the capsule resected. Histopathologic examination revealed abundant goblet cells consistent with a neuroenteric cyst. Dural closure was bolstered with fascia lata and autologous fat graft. Postoperative magnetic resonance imaging (MRI) was consistent with gross total resection (►Fig. 1C, D). The patient tolerated the procedure well with no new postoperative neurological deficits and was discharged home on postoperative day 2. On completing a 3-day decadron taper, he developed steroid-responsive symptoms consistent with aseptic meningitis, possibly related to cerebrospinal fluid contamination with the cyst contents during resection.

The link to the video can be found at: <https://youtu.be/SskETPe5PXQ>.

Keywords

- neuroenteric cyst
- far lateral approach
- craniocervical junction
- neuroenteric cyst



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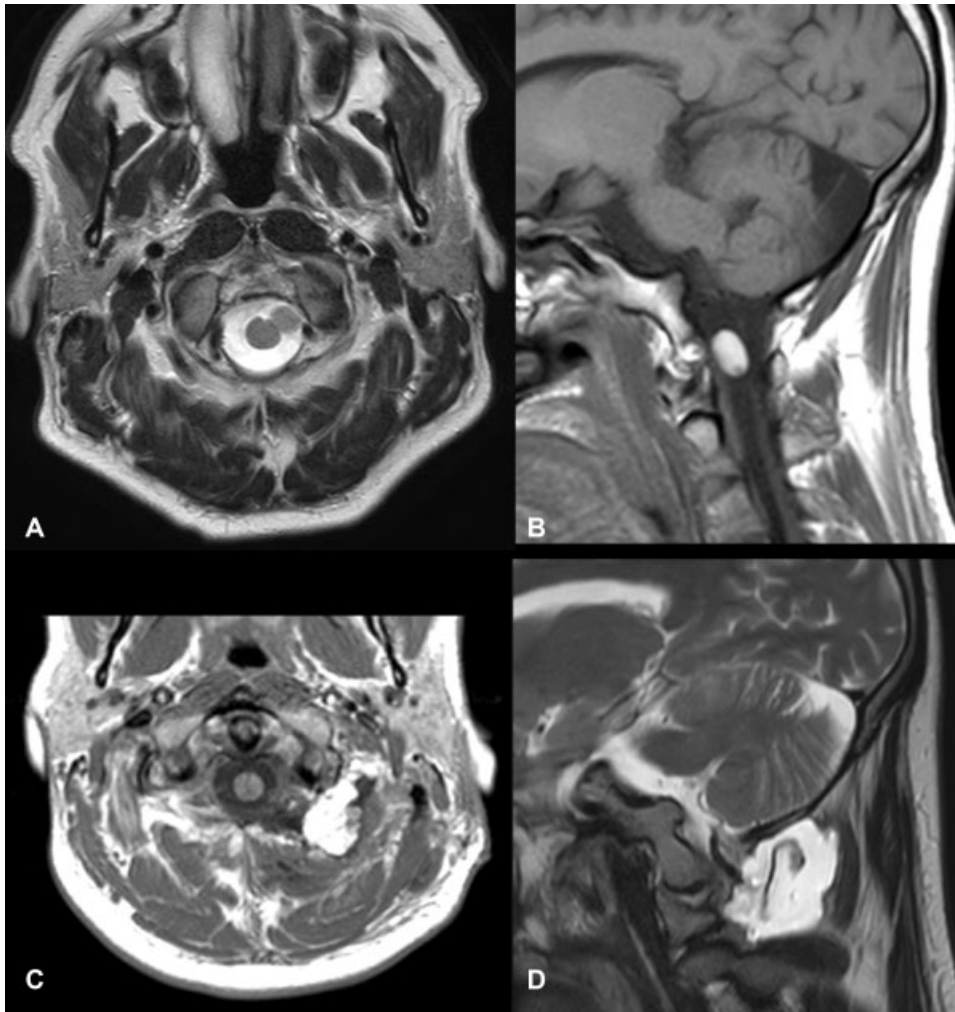


Fig. 1 Preoperative axial (A) and sagittal (B) MR images of an enhancing mass at the craniocervical junction. Postoperative MR images in axial (C) and sagittal (D) views show gross total resection with fat packing at the surgical site. MR, magnetic resonance.

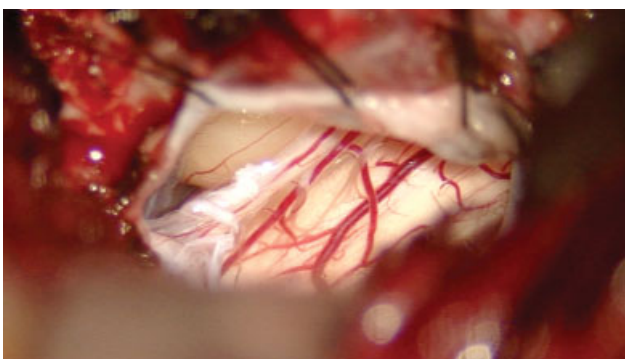


Fig. 2 Intraoperative image showing left far lateral exposure for resection of the mass.

Conflict of Interest

The authors report no conflict of interest concerning the materials or methods used in this study or the findings specified in this paper.

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