




Far Lateral Approach for Resection of Transverse Ligament Cyst

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Abstract

Objectives This study was aimed to describe a far lateral approach for microsurgical resection of a transverse ligament cyst, with emphasis on the microsurgical anatomy and technique.

Design A far lateral craniotomy is performed in the lateral decubitus position. After opening the dura laterally, dural sutures are placed for retraction. A stitch placed through the dentate ligament is advantageous to rotate the spinal cord to allow access to the ventral cyst. The cyst is marsupialized and mass effect on the spinal cord is relieved. Photographs of the region are borrowed from Dr Rhoton's laboratory to illustrate the microsurgical anatomy.

Participants The first author performed the surgery and edited the video. Chart review and literature review were performed by the other authors.

Outcome Measures Outcome was assessed with postoperative neurological function.

Results The patient was discharged home after an uneventful hospital course. At short-term follow-up, the patient had a significant improvement in postoperative strength.

Conclusion The far lateral approach provides an adequate corridor to the ventrolateral brainstem in combination with utilization of the dentate ligament to reach ventral cysts compressing the spinal cord. An adequate understanding of the relevant microsurgical anatomy is a key to safe surgery in this region.

The link to the video can be found at: <https://youtu.be/5MGVPO2Q2pl>.

Keywords

- ▶ far lateral
- ▶ craniotomy
- ▶ transverse ligament
- ▶ cyst
- ▶ skull base
- ▶ microsurgery
- ▶ dentate ligament
- ▶ neurosurgery

Conflict of Interest
None declared.



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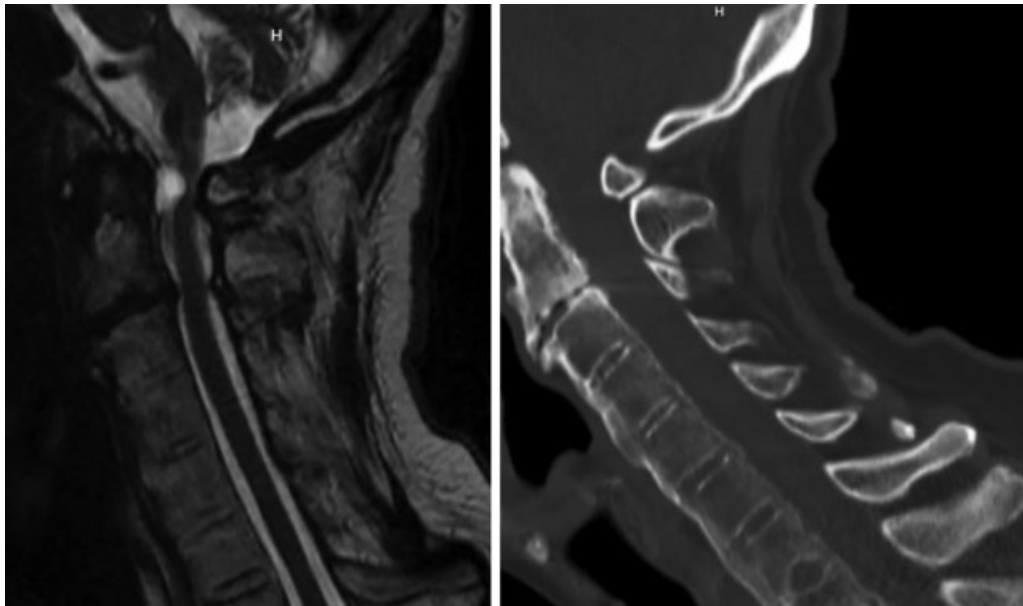


Fig. 1 These images show a ventral C2 synovial cyst with significant spinal cord compression in the setting of ankylosing spondylitis.

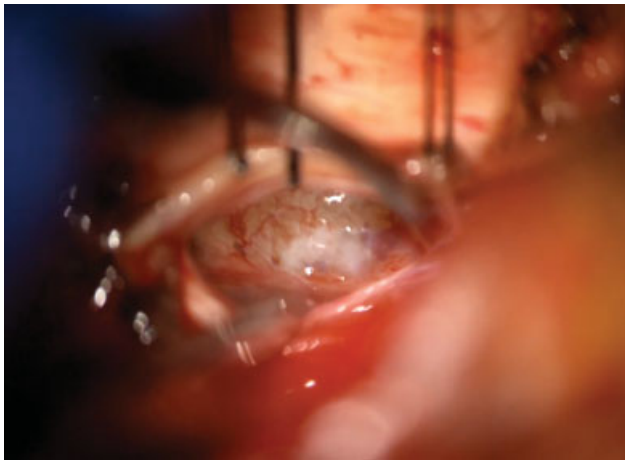


Fig. 2 A far lateral approach provides an optimal corridor to the ventrolateral craniocervical junction for resection of this large cyst.