Clival Chordoma: Endoscopic Bilateral Transmaxillary Approach

A. Samy Youssef¹  Alexander Yang²  Anne E. Getz³  Inoue Mizuho²  Mohamed Labib⁴

¹Department of Neurosurgery and Otolaryngology, University of Colorado, Aurora, Colorado, United States
²Department of Neurosurgery, University of Colorado, Aurora, Colorado, United States
³Department of Otolaryngology, University of Colorado, Aurora, Colorado, United States
⁴Department of Neurosurgery, Barrow Neurological Institute, St. Joseph’s Hospital and Medical Center, Phoenix, Arizona, United States

Abstract

We present a case of a large clival chordoma in a 54-year-old female with a past medical history of Turner’s syndrome and a 1.5-year history of nasal congestion. The tumor was extending in the nasopharynx to both pterygopalatine fossae. An expanded endoscopic endonasal approach was selected. Stereotactic navigation was utilized. Bilateral transmaxillary approach with ethmoidectomy was performed, and a transclival corridor to the deepest portion of the tumor was created. The tumor was successfully dissected off the medial walls of the cavernous sinuses. Gross-macroscopic resection was achieved. Surgical reconstruction of the skull base comprised of a fat graft, fascia lata overlay, and dural sealant. Given the extensive nasal involvement by the tumor, a vascularized nasoseptal flap was not feasible. The patient had an unremarkable postoperative course. She underwent intensity-modulated radiation therapy (IMRT) radiotherapy 6 weeks later, and was seen in follow-up 6 months later, with no issues.

The link to the video can be found at: https://youtu.be/4bnsEUtieAw.

Keywords

► endoscopic
► endonasal
► chordoma
► clival
► transmaxillary

Conflicts of Interest

None declared.