

# Clivus chordoma treatment

Treatment is en bloc surgical resection followed by high-dose conformal [radiation therapy](#) such as [Proton therapy](#)<sup>1)</sup>.

The management of chordomas of the base of the skull is particularly challenging as they lie adjacent to vital anatomic structures, such as the carotid and basilar arteries and the brain stem, which limits surgical access and resectability as well as delivery of high doses of radiation<sup>2) 3)</sup>.

The transnasal and [transclival approach](#) is for many chordomas a feasible and safe surgical access<sup>4) 5)</sup>  
<sup>6)</sup>

Larger tumors, especially those with extensive intradural retrochiasmal and/or deep cervical expansion, are most often resected by open craniotomy. A large number of transcranial approaches have been described in the last decade<sup>7) 8) 9)</sup>

Staged procedures are also commonly used in the case of expansive tumor growth.

Koechlin et al. present the first case of a single-session combined transnasal and transcranial approach to radically resect a large clival chordoma.<sup>10)</sup>.

## Endoscopic transnasal transclival approach

see [Endoscopic endonasal transclival approach for clivus chordoma](#).

## Lateral transcondylar approach

see [Lateral transcondylar approach](#).

## Bilateral Extreme Far Lateral Transodontoid Approach

Donoho DA, Bauer DF, Whitehead WE, Aldave G. Bilateral Extreme Far Lateral Transodontoid Approach for Resection of Large Chordoma in Clivus and Craniocervical Junction. Oper Neurosurg (Hagerstown). 2022 Mar 18. doi: 10.1227/ons.0000000000000151. Epub ahead of print. PMID: 35302960.

## Complications

[Cerebrospinal Fluid Fistula](#).

<sup>1)</sup>  
Tenny S, Varacallo M. Chordoma. 2022 Feb 12. In: StatPearls [Internet]. Treasure Island (FL):

StatPearls Publishing; 2022 Jan-. PMID: 28613596.

2)

Austin JP, Uriel MM, Cardenosa G, Munzenrider JE. Probable causes of recurrence in patients with chordoma and chondrosarcoma of the base of skull and cervical spine. *Int J Radiat Oncol Biol Phys* 1993;25:439-444

3)

Castro JR, Linstadt DE, Bahary JP, et al. Experience in charged particle irradiation of tumors of the skull base: 1977-1992. *Int J Radiat Oncol Biol Phys* 1994;29:647-655

4)

Holzmann D, Reisch R, Krayenbühl N, Hug E, Bernays R L. The transnasal transclival approach for clivus chordoma. *Minim Invasive Neurosurg.* 2010;53(5-6):211-217.

5)

Saito K, Toda M, Tomita T, Ogawa K, Yoshida K. Surgical results of an endoscopic endonasal approach for clival chordomas. *Acta Neurochir (Wien)* 2012;154(5):879-886.

6)

Fraser J F Nyquist G G Moore N Anand V K Schwartz T H Endoscopic endonasal minimal access approach to the clivus: case series and technical nuances *Neurosurgery* 2010. 673, (Suppl Operative):ons150-ons158.ons158; discussionons158

7)

Crumley R L, Gutin P H. Surgical access for clivus chordoma. The University of California, San Francisco, experience. *Arch Otolaryngol Head Neck Surg.* 1989;115(3):295-300.

8)

Harbour J W, Lawton M T, Criscuolo G R, Holliday M J, Mattox D E, Long D M. Clivus chordoma: a report of 12 recent cases and review of the literature. *Skull Base Surg.* 1991;1(4):200-206.

9)

Sen C, Triana A I, Berglind N, Godbold J, Shrivastava R K. Clival chordomas: clinical management, results, and complications in 71 patients. *J Neurosurg.* 2010;113(5):1059-1071.

10)

Koechlin NO, Simmen D, Briner HR, Reisch R. Combined transnasal and transcranial removal of a giant clival chordoma. *J Neurol Surg Rep.* 2014 Aug;75(1):e98-e102. doi: 10.1055/s-0034-1373668. Epub 2014 May 28. PubMed PMID: 25083400; PubMed Central PMCID: PMC4110148.

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