

Microsurgical Resection of Tuberculum Sellae Meningioma through Left Cranio-orbital Approach

Mirza Pojskić¹ Kenan I. Arnautović²

¹ Department of Neurosurgery, University of Marburg, Marburg, Germany

² Semmes Murphey Neurologic and Spine Institute, Department of Neurosurgery, University of Tennessee Health Science Center, Memphis, Tennessee, United States

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Abstract

In this video clip, the authors present the resection of a tuberculum sellae meningioma with compression of the left optic nerve and a chiasm (\succ Fig. 1) through a standard cranial orbital (CO) skull base approach.^{1–3} The key step in the tumor resection was microsurgical dissection of left and right A1 segments of the anterior cerebral artery and the anterior communicating artery and the separation of the tumor from these vascular structures. This was followed by careful separation of the meningioma from both optic nerves, the chiasm and the pituitary stalk. The final step was coagulation and resection of the tumor origin on the dura of the tuberculum sellae, devascularizing the tumor. Once this was achieved, the tumor was removed. Using this approach, an optimal surgical corridor to the sellar area was provided while minimizing the retraction of frontal and temporal lobes.

(e-mail: kenanarnaut@yahoo.com).

Address for correspondence Kenan I. Arnautović, MD, PhD, Semmes

Neurosurgery, University of Tennessee Health Science Center, 6325

Murphey Neurologic and Spine Institute, Department of

Humphreys Boulevard, Memphis, TN 38120, United States

Keywords

- tuberculum sellae meningioma
- suprasellar meningioma
- cranio-orbital skull base approach

Conflict of Interest None. The link to the video can be found at: https://youtu.be/O59Fj2dNXB0.



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Fig. 1 Postconstrast MRI of the head. Left up: preoperative T1-weighted sagittal view. Right up: preoperative T1-weighted coronar view. Left down: postoperative T1-weighted sagittal view. Right down: postoperative T1-weighted coronar view. MRI, magnetic resonance imaging.

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