



Anterior Inter-hemispheric Transcallosal Approach for Resection of Colloid Cyst: A Video Abstract

Sarah Basindwah¹ Aysha Hawsawi¹ Amjad Alduhaish¹  Abdulrazag Ajlan¹

¹Department of Neurosurgery, King Saud University Medical City, Riyadh, Saudi Arabia

Address for correspondence Sarah Basindwah, MD, Division of Neurosurgery, Department of Surgery, College of Medicine, King Saud University, Riyadh, Saudi Arabia (e-mail: sarah.basindwah@gmail.com).

Indian J Neurosurg 2023;12:188–189.

Abstract

Background Although histologically benign, colloid cysts have been an entity of interest to neurosurgeons due to the wide array of possible presentations ranging from asymptomatic to high ICP symptoms to sudden death. It is estimated that colloid cysts represent 0.3 to 2% of all brain tumors.¹

As they are typically located in the third ventricle, multiple approaches have been adapted and developed for the maximum resection with the least complications given the sensitive anatomy in the area.^{1,2} The interhemispheric transcallosal approach can be safely performed to fully resect a third ventricle colloid cyst with close to zero recurrence rate and minimal to none permanent deficits.³ This video is an educational illustration of the surgical technique and the related anatomy for the interhemispheric transcallosal approach and how to provide best chances of a benign postoperative course.

Case Description In this surgical video, we present a case of a 20-year-old male, a known case of hypertension and un-controlled diabetes type-1, presented to our hospital with on and off headache, dizziness, and diplopia that gradually progressed. His neurological exam was unremarkable including memory function. CT and MRI scans demonstrated a rounded sharply demarcated lesion at the at the roof of the third ventricle, measuring 1 × 1 cm in size. The patient underwent an anterior inter-hemispheric transcallosal approach, with gross total resection of the cyst. In the follow-up office visit, the patient headache has resolved, and he had no seizures with preserved memory functions.

Conclusion When removal of the colloid cyst is indicated, the interhemispheric transcallosal approach can be performed safely with gross total resection and minimal neurological deficit. This is a surgical demonstration of the transcallosal approach showcasing the surgical corridors and related anatomy.

Keywords

- colloid cyst
- transcallosal approach
- interventricular tumor
- hydrocephalus

Annotation

1. 00:00–00:22 _Clinical presentation.
2. 00:23–01:08 _Preoperative imaging.
3. 01:09–01:27 _Rational, positioning, and surgical planning.
4. 01:28–04:40 _Procedure video.
5. 04:41–05:03 _Postoperative imaging.
6. 05:04–05:14 _Surgical outcome and follow up

Video 1

Anterior Inter-hemispheric Transcallosal Approach for Resection of Colloid Cyst: A Video Abstract. Online content including video sequences viewable at: <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0042-1759887>.

Conflicts of Interest

None declared.

References

- 1 Elshamy W, Burkard J, Gerges M, et al. Surgical approaches for resection of third ventricle colloid cysts: meta-analysis. *Neurosurg Rev* 2021;44(06):3029–3038
- 2 Nair S, Gopalakrishnan CV, Menon G, Easwer HV, Abraham M. Interhemispheric transcallosal transforaminal approach and its variants to colloid cyst of third ventricle: technical issues based on a single institutional experience of 297 cases. *Asian J Neurosurg* 2016;11(03):292–297
- 3 Sethi A, Cavalcante D, Ormond DR. Endoscopic versus microscopic transcallosal excision of colloid cysts: a systematic review in the era of complete endoscopic excision. *World Neurosurg* 2019;132:e53–e58