



## Video Abstract

# Interhemispheric transcallosal transforaminal approach for decompression of a giant superior cerebellar artery thrombosed aneurysm: Three-dimensional operative video

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## ABSTRACT

**Background:** Giant brain aneurysms account for approximately 5% of all intracranial aneurysms, often presenting with intraluminal thrombosis that causes a mass effect in surrounding neural structures. Although its exact growing mechanism remains unknown, they have to be treated. Despite the most recent advances in neurosurgical fields, the best treatment modality remains unknown and surgery of giant superior cerebellar artery (SCA) aneurysms still is a challenge even for the most experienced neurosurgeons, due to their deep location, surrounding perforating vessels, and intraluminal thrombosis.

**Case Description:** In this video, we present the case of a 65-year-old woman with progressive hemiparesis and paresis of low cranial nerves. The symptoms were caused by a giant aneurysm located in the origin of the SCA. Despite endovascular embolization of the aneurysm and placement of a flow diverter stent, the aneurysm increased in size causing symptoms progression. In that scenario, we decided to perform a microsurgical decompression of the aneurysm thrombus and coagulation of the vasa vasorum, to reduce the mass effect and prevent the aneurysm from keep growing.

**Conclusion:** Through an extensive description of the surgical anatomy, we illustrate an interhemispheric transcallosal transforaminal approach, with the removal of anterior thalamic tubercle to widely expose the aneurysm dome. The surgery was successfully performed, and the patient symptoms improved. The patient signed the Institutional Consent Form, which allows the use of her images and videos for any type of medical publications in conferences and/or scientific articles.

**Keywords:** Decompression, Giant aneurysm, Interhemispheric transcallosal transforaminal, SCA, Surgical approach

### [Video 1]-Available on:

[www.surgicalneurologyint.com](http://www.surgicalneurologyint.com)

### Annotations: <sup>[1,2,3,4]</sup>

- 1) 00:12– Case Description
- 2) 00:23 – Pre Operative images

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- 3) 02:06 – Patient position
- 4) 02:40 – Interhemispheric fissure dissection
- 5) 03:40 – Cingulum gyrus resection
- 6) 03:59 – Corpus callosotomy
- 7) 04:52 – Thalamus anterior tubercle resection
- 8) 05:17 – Thrombectomy
- 9) 09:17 – Post Operative MRI

#### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

#### Conflicts of interest

There are no conflicts of interest.

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