PARAMEDIAN CONTRALATERAL SUPRACEREBELLAR INFRATENTORIAL APPROACH TO THALAMIC CAVERNOUS MALFORMATION

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Cavernous malformations (CVMs) located in the thalamus are uncommon. However, they pose difficulties for resection because of their close proximity to eloquent areas of the brain and vascular structures, and all surgical corridors to access them are narrow. In this video, we report the case of a 19-year-old woman who presented with a long-standing history of right hemiparesis with recent deterioration. MRI revealed a large CVM located in the left thalamus, with signs of recent hemorrhage extending to the left cerebral peduncle. Resection was achieved with a paramedian contralateral supracerebellar infratentorial approach in a semisitting position, with an uneventful postoperative course.

The video can be found here: https://youtu.be/Arvu52FkHOE.

KEYWORDS thalamic cavernous malformation; supracerebellar infratentorial approach; microsurgical resection; video
well as the pineal gland, the vein of Galen, the left basal vein of Rosenthal, and the precentral cerebellar vein.

04:17 The operative corridor was checked with the aid of neuronavigation, aimed at the cisternal portion of the left pulvinar.

04:27 The lesion was exposed after white matter dissection. It had a typical cavernous malformation aspect.

05:00 The lesion was gradually devascularized.

05:21 We removed the cavernous malformation in a piecemeal fashion, using meticulous dissection and coagulation and avoiding excessive manipulation of the adjacent structures.

06:14 After complete removal of the lesion, careful and thorough hemostasis was performed.

06:20 It is generally reported that the PCCV can be sacrificed without any clinical symptoms, as it was necessary at the end of this case. In this final picture, it is possible to visualize the surgical corridor after dissection and removal of the cavernous malformation.

06:42 The dura was closed in a watertight fashion, followed by sutures of layers of muscle, subcutaneous tissue, and skin.

06:52 The patient had an excellent postoperative recovery.

06:58 She underwent postoperative MRI 3 months later, with good results after surgery.

07:06 Her motor strength returned to the baseline immediately after surgery, and showed even further improvement after 3 months, reaching grade 4+.

References

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Disclosures
The authors report no conflict of interest concerning the materials or methods used in this study or the findings specified in this article.