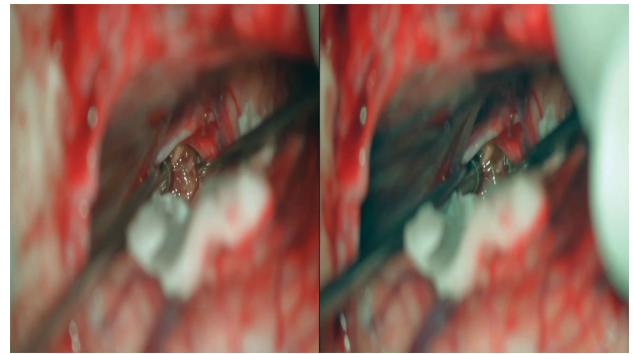


Supracerebellar-Infratrochlear Approach for Midbrain Cavernoma: 3-Dimensional Operative Video

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Gravity retraction is an underutilized adjunct in neurosurgery. Gravity is gentler than retractor blades; it does not cause brain edema or injury, and it tends to open natural subarachnoidal plans to deep lesions.¹⁻³ A good example of this is the supracerebellar infratrochlear approach⁴⁻⁷ in semisitting position for resection to a midbrain cavernous malformation. This approach was selected because the

cavernous malformation was 1 mm under the lateral mesencephalic sulcus. The procedure was developed with the use of transesophageal ultrasound and physiological neuromonitoring. We present a 3-dimensional video of this surgery with all the tricks and details used in the procedure. The patient consented to the procedure and to publication of the photos and surgical video.

KEY WORDS: Cavernoma, Midbrain, Supracerebellar-infratrochlear approach, Gravity, Semisitting position

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COMMENT

The authors present a high-quality video and an excellent example of a supracerebellar infratentorial approach for the resection of a symptomatic midbrain cavernoma. The video is of high quality and surgery is masterly performed. This is valuable to the neurosurgical community. In our experience, the use of stereotactic navigation also has a role in confirming the location of the lesion and critical anatomic landmarks in order to perform this surgery with maximum safety. It is important to note on the magnetic resonance imaging that the hemosiderin ring has reached the pial surface, which makes this an optimal case for surgical resection. If the hemosiderin ring, or cavernoma has no pial extension then the risks of surgical resection are much higher.

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