Transcallosal approach for third ventriculostomy and removal of midbrain cavernous malformation

WILLIAM T. COULDWELL, M.D., PH.D.

Department of Neurosurgery, University of Utah, Salt Lake City, Utah

Symptomatic brain stem cavernous malformations often present the dilemma of choosing an approach for their resection. Superior midline midbrain lesions are in a particularly challenging location, as they are less accessible via traditional lateral or posterior approaches. The author presents a case of a young woman who presented with a symptomatic cavernous malformation with surface presentation to the floor of the third ventricle. The lesion was causing sensory symptoms from local mass effect and hydrocephalus from occlusion of the Aqueduct of Sylvius. An approach was chosen to both perform a third ventriculostomy and remove the cavernous malformation. Through a right frontal craniotomy, a transcallosal–transforaminal approach was used to perform a third ventriculostomy. Through the same callosal opening, a subchoroidal approach was performed to provide access the cavernous malformation. The details of the procedure and nuances of technique are described in the narration.

The video can be found here: [http://youtu.be/zKKnehp7l2c](http://youtu.be/zKKnehp7l2c).

Key Words • transcallosal • third ventriculostomy • cavernous malformation • midline • hydrocephalus • video