# PARAFASCICULAR SURGICAL APPROACH Intraventricular Tumor

### **Clinical Presentation**

The patient is a 60-year-old female who had been experiencing 6 weeks of increasing gait difficulty. She presented after experiencing disturbances in memory and difficulty concentrating. Scans showed a colloid cyst measuring 13mm within the third ventricle, having slight extension into the foramen of Monroe.

#### **Surgical Management**

A surgical trajectory was planned prior to the operation. A large vessel lay across the sulcus opening of choice and was safely mobilized to allow cannulation. The set trajectory was carried out anteriorly down the superior frontal sulcus, between the superior longitudinal fasciculus and cingulum, to just above the foramen of Monroe and choroid plexus. The cannulation along this trajectory allowed for access to the cyst wall. After opening the wall, suction was used to clear the viscous contents, followed by automated resection of the wall itself. A 95 percent resection was achieved.

#### **Clinical Course and Outcomes**

Post-operatively, the patient experienced severe memory deficits, which improved by post-operative day five. One day was spent in the ICU. The patient was expected to go to rehab, but was doing well and was sent home instead on post-operative day nine. Significant improvements from pre-operative status have been observed including complete resolution of gait disturbance. Some short-term memory deficits do exist.

#### **PRE-OP SCANS**





## 24 HOURS POST-OP



Click on the video image to view the NICO BrainPath used in accessing an intraventricular tumor.



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