



## SSG CASE REVIEW | Trans-Sulcal Surgical Approach Biopsy of Intraventricular Anaplastic Astrocytoma

### Clinical Presentation

The patient is a 47 year-old female with neurofibromatosis type 1 (NF1). She had a history of pilocytic astrocytoma resection many years ago. She presented to a follow-up appointment with headaches. Imaging revealed a **2.5cm exophytic thalamic mass protruding into her 3rd ventricle**. Prior to surgery, the patient had no deficits and a Karnofsky Performance Scale (KPS) score of 100.

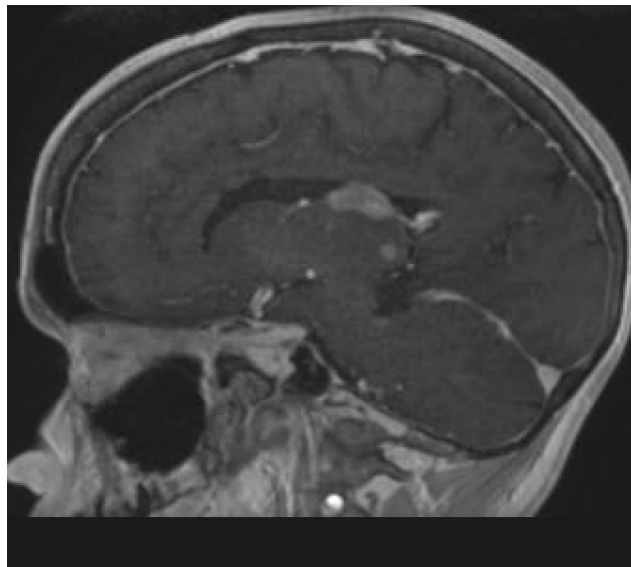
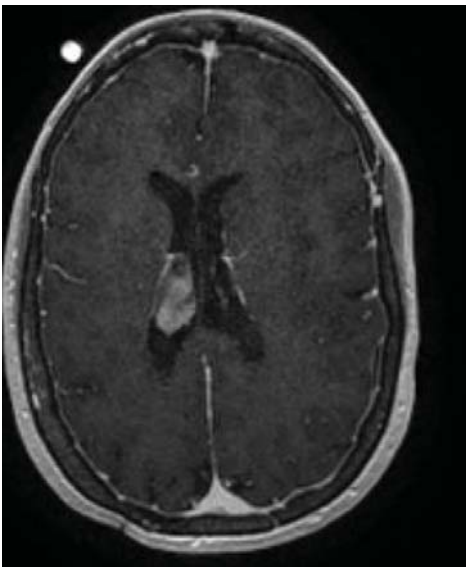
### Surgical Management

A right intraparietal sulcal approach was used to access the 3rd ventricle with a tubular retractor. Once in the ventricle, a generous biopsy was performed. **Resection was not an option due to diffuse thalamic disease**. Total surgical time was 1 hour.

### Clinical Course & Outcomes

The patient was discharged on post-op day 2. **There were no post-op deficits and she did not develop any delayed hydrocephalus**. Her pathology indicated anaplastic astrocytoma (IDH-). She initially began therapy with temozolomide (TMZ) and radiation but later found to have tumor progression. Sequencing of the tumor indicated mutations in CD274 (encodes PD-L1) and PDCD1LG2 (encodes PD-L2). **Because of this knowledge, the patient was switched to nivolumab and she noted to have a response**.

#### Pre-Op Scans:



If you have a notable case review to share, please contact us at [info@SubcorticalSurgery.com](mailto:info@SubcorticalSurgery.com)