

SSG CASE REVIEW: Trans-Sulcal Surgical Approach Right Cerebellar Metastasis

Clinical Presentation

The patient is a 78 year-old female with a history of lung adenocarcinoma. She presented with 2-3 weeks of headaches, nausea, vomiting, in-coordination (especially of the right hand), and imbalance. The neurological exam showed finger-to-nose dysmetria, truncal ataxia, and right upper extremity drift. Head CT and MRI showed the presence of a **2.0cm x 1.9cm right cerebellar mass at the junction between the cerebellar hemisphere and vermis**, with surrounding vasogenic edema consistent with a brain metastasis.

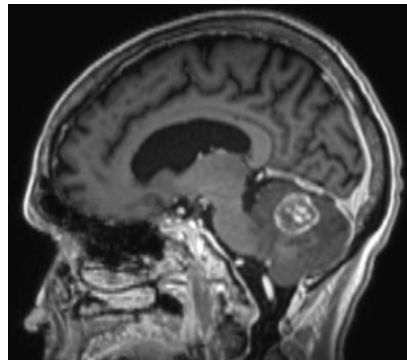
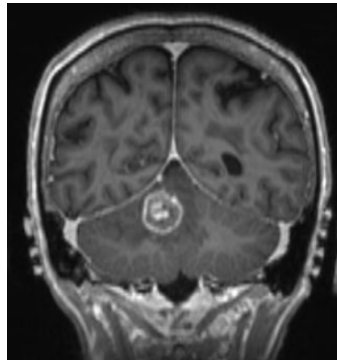
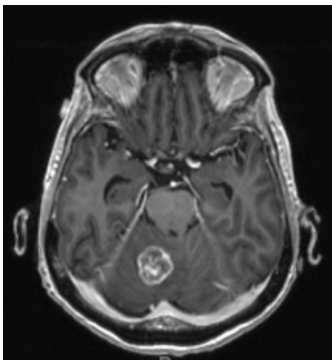
Surgical Management

A right cerebellar hemisphere approach was selected to run parallel to the folia in an effort to preserve white matter tracts. After the dura was opened, a tubular retractor was cannulated along the pre-planned trajectory to the target lesion. Due to the fibrosity of the mass, the tumor displaced during cannulation. Ultrasound was used to verify that the retractor was lateral to the tumor. The tubular retractor was removed and recannulated to the surface of the lesion in order to avoid displacement. An automated resection device was used to remove the bulk of the metastasis. **Visual inspection of the surrounding white matter, as well as ultrasound confirmation, was used to confirm extent of resection.**

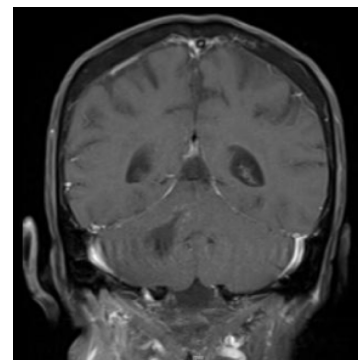
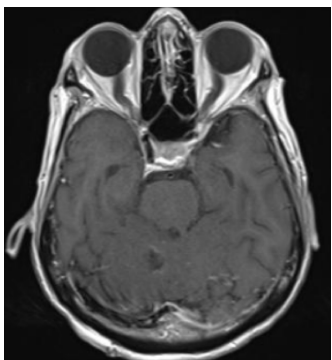
Clinical Course and Outcomes

The patient spent one night in the ICU, with an overall hospital stay of five days. Patient had **improved dysmetria, truncal ataxia and headaches** post-operatively. Post-operative imaging showed **gross total resection** and **minimal change in vasogenic edema**.

Pre-Op Scans



Post-Op Scans (48 hours)



If you have a notable case review to share, please contact us at info@SubcorticalSurgery.com