

SUBCORTICAL SURGERY GROUP

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SSG CASE REVIEW

Trans-Sulcal Surgical Approach: Left Parietal Hemorrhagic (Presumptive) Renal Metastasis

Clinical Presentation

Patient is a 63-year-old woman with a history of metastatic renal cell carcinoma. She presented with a rapid onset of right-sided weakness and sensory disturbance. On admission, she was noted to have 4-/5 strength in the proximal right upper extremity, 3/5 strength in the distal right upper extremity, and 4/5 strength in the right lower extremity. Head CT revealed a ~35cc posterior frontal intraparenchymal hemorrhage. Given concern for an underlying neoplasm, she underwent a contrast enhanced MRI with DTI. This revealed a likely enhancing mass lesion at the deep aspect of the clot. DTI suggested the SLF displaced inferiorly and the CST displaced anteriorly.

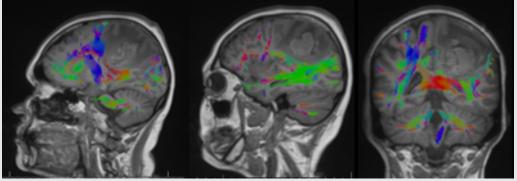
Surgical Management

A left superior parietal lobule approach was selected as the corticospinal tract was noted to be displaced anteriorly and the SLF was noted to be displaced inferiorly. Ultrasound was used post craniotomy to identify hematoma size and depth. A 60mm tubular retractor was cannulated down the chosen sulcus to the target point of the hematoma. The hematoma and tumor were removed using an automated cutting device. Hemostasis needs were achieved with irrigation, cotton balls, floseal, and minimal use of cautery. Total case time was approximately 2 hours.

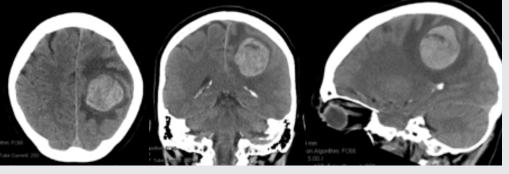
Clinical Course and Outcomes

Patient was initially noted to have more significant weakness immediately following surgery. Over the next several days, her strength improved significantly. She was discharged to an inpatient rehabilitation facility on post-operative day four with 4/5 strength in the right upper and lower extremity. Final pathology was consistent with hemorrhagic renal cell carcinoma. She is planned for adjuvant stereotactic radiosurgery.

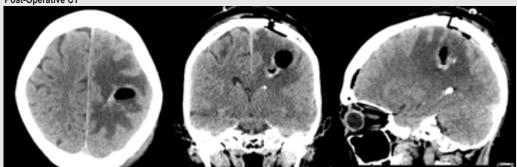
Pre-Operative Contrast Enhanced MRI with DTI



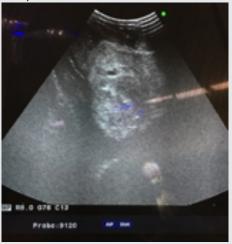
Pre-Operative CT Scans



Post-Operative CT



Pre-Operative Ultrasound



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