

SUBCORTICAL SURGERY GROUP

SSG CASE REVIEW

Rationale for Choosing this Approach

In traditional open surgery methods, we would have gone straight through the motor cortex to get to the bleed and it would have been destructive to the patient, leaving him with severe disabilities and likely paralyzed on his left side. With the approach using BrainPath, there was complete resection, the patient has fewer deficits, and he is walking.

Clinical Case Details

The patient is a 20-year-old male admitted to Houston Methodist Hospital on April 20, 2015 with a thalamus and brainstem cavernous malformation. Pre-surgical deficits upon arrival were visual cuts and motor impairment that included weakness and numbness on the contralateral side. The size of the lesion was 30mm. Surgery was performed same day as admittance.

Initially, I wanted to take a lateral approach. But after study of the DTI, saw that the tumor was pushing motor and corticospinal laterally, which would have caused significant damage. Surgical pre-planning took a lot of time and I elected for a frontal approach down the long access just outside of the lateral ventricle. I used an 11ga resection tool (NICO Myriad) to remove the lesion that was fairly calcified. The patient was awake during the procedure because of the tumor proximity to the motor cortex, and I was able to periodically check the patient's motor functions during resection. Complete resection was achieved during a total procedure time of 3 hours and 12 minutes.

Clinical Outcomes

Immediately following surgery, the patient reported that he felt better and the numbness had significantly improved or was gone. The patient was taken to ICU, where he stayed overnight. He remained in the hospital for 6 days before discharge to rehabilitation. Currently, the patient reports minor "pins and needles" feeling on left side, which I believe is nerve pain resulting from brain recovery. He is walking and will continue to improve over time. There is a less than 1 percent change of recurrence.



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

The details and associated images and/or video of this clinical case were used with permission by the surgeon and is for illustrative purposes only. 2015.