ED-27. CLINICAL CHARACTERISTICS AND LONG-TERM OUTCOME IN MOVEMENT DISORDER IN CHILDHOOD THALAMIC TUMORS
Zsila Sadighi, Jennifer Zabrowski, Alberto Broniscer, Amar Gajjar, and Raja Khan; St. Jude Children’s Research Hospital, Memphis, TN, USA

BACKGROUND: Clinical observations of children with thalamic tumors and secondary movement disorders (MD) suggest correlation between anatomical location and treatment modalities to severity of MD. METHODS: We conducted an IRB approved retrospective review of patients ≤18 years old with thalamic tumors and MD at St. Jude Children’s Research Hospital from 1996-2013. Magnetic Resonance Imaging (MRI) was reviewed and thalamic nuclei involved with tumor and/or surgical site were documented. MD severity was rated with Karnofsky Performance Score (KPS); Extrapyramidal Symptom Rating Scale (ESRS), which scores 0 (absent) to 6 (extremely severe); and Clinical Global Impression of Severity for dystonia and dyskinesia (CGI-S), which scores 0 (absent) to 8 (extremely severe). RESULTS: We reviewed 83 patients with thalamic with 9 confirmed MD by neurological evaluation. Median age at tumor diagnosis was 7 years old (3 months-11 years), median age at MD onset was 7 years old (18 months-11 years). Types of MD found were postural tremor (7), ballismus (4), myoclonus (1), and athetosis (4). Median time to last follow-up was 3 years. 8 patients had onset of MD median of 1.5 months (0-4 months) time after surgical intervention. Initial median KPS was 80 (60-90) and at last follow-up was 80 (50-90). Initial median ESRS was 5 (3-8) and at last follow-up was 5 (0-5). Initial median CGI-S was 5 (3-6) and at last follow-up was 4 (0-6). Based on these severity scales, 2 patients showed no change, 1 patient worsened, 1 patient completely resolved, and 4 patients had improvement regardless of initial extent of surgery or number of nuclei involved. CONCLUSION: This retrospective analysis compares thalamic tumor anatomical locations and treatment intervention with respect to movement disorder clinical characteristics and outcomes. Extent of location and surgical intervention did not correlate to severity and will be included in final presentation.