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Abstract

Poster Session B

Thursday, October 18, 2018 6:30pm - 8:00pm

DEVELOPMENTAL AND PEDIATRIC: OTHER

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Neuropsychological Recovery in a Pediatric Case of a Cerebellar Cognitive Affective Syndrome Status-Post Cerebellar Tumor Resection

Muslin S, Peery S, Aaron H, Burciaga J, Hirst R

Objective: This case characterizes the longitudinal neuropsychological outcome of pediatric cerebellar cognitive affective syndrome (CCAS), prior to and status-post cerebellar tumor resection, at three separate time points between ages 7 and 11. Method: A Chinese-American, bilingual girl underwent gross resection of cerebellar vermis astrocytoma at age seven. Initial magnetic resonance imaging (MRI) revealed left-to-right midline shift with partial effacement of the left lateral ventricle. A comprehensive neuropsychological battery was administered prior to resection, and at ages 9 and 11. An average Z score was calculated for each neuropsychological domain. Results: Across all sessions, the child showed blunted affect and impaired verbal initiation. The pre-operative evaluation revealed expressive and receptive language difficulties (Z = -1.70 and -1.00, respectively) and slow processing speed (Z = -1.09). Post-operative evaluation two years later revealed persistent difficulties with expressive language (Z = -1.06) and processing speed (Z = -1.22), as well as lagging social skills (Z = -0.91) and executive functions (Z = -2.23), with improved receptive language (Z = -1.78), processing speed (Z = -1.00), and social communication with improved receptive language (Z = 0.16) and executive functioning (Z = -0.29). Conclusions: Serial neuropsychological evaluations revealed persistent deficits of expressive language, processing speed, and social skills, with improved receptive language. The child "grew into her deficits" of executive functioning prior to improving. Although affective disturbance and expressive language difficulties were seen across all evaluations, this case demonstrates gradual resolution of symptoms of CCAS.