NEUROONCOLOGY

P409

THE POSTERIOR FOSSA SYNDROME PREDICTS A POOR LONG TERM FUNCTIONAL OUTCOME

Coriene E. Catsman-Berrevoets. Erasmus University / Sophia Children's Hospital, Netherlands

Introduction: The Posterior Fossa Syndrome (PFS) has become a well-recognized clinical entity and may occur in children after resection of cerebellar tumors. The most common feature is mutism, but also oropharyngeal dyspraxia, emotional lability and neuropsychiatric symptoms occur. Studies on the long-term outcome of deficits after treatment of cerebellar tumors describe in long-term motor problems as well as problems with memory, attention, language, speech, visual-spatial, executive functions, and affect regulation in different combinations and to different degrees. These deficits fit in the spectrum of the cerebellar cognitive affective syndrome (CCAS). Until now, the consequences of PFS on long term outcome have not been systematically addressed. The purpose of the present study was to study the effect on long term neurologic and cognitive outcome.

Methods: After resection of a cerebellar tumor, children were prospectively followed according to protocol with neurological assessments, neuropsychological investigations and MRI. Of 31 children with PFS (out of 144 children with cerebellar tumor resection between 1994 and 2012) neurologic, neuropsychological and functional outcome at 1, 2 and 5 years follow up was compared with that of children without PFS after cerebellar tumor resection.

***Results*:** Children with PFS after cerebellar surgery had significantly more neurological deficits, lower IQ and lower scores on a modified Rankin scale at all measure points.

***Conclusion*:** MSD and PFS after surgery are important risk factors for poor long term functional outcome in children that are treated for a cerebellar tumor.

NEURO-OPTHALMOLOGY

P411

THE UTILITY OF A SEMI-QUANTITATIVE SCORING OF ORBITAL IMAGING FOLLOWING THE FIRST EPISODE OF OPTIC NEURITIS: A PILOT STUDY.

Rahul Raman Singh[1], Claudia Palmer[2], Ata Siddiqui[3], Jean Marie U-kim[3], Michael Absoud[4], Ming Lim[4]. [1]Children's Neurosciences, Evelina London Children's Hospital@ Guys and St.Thomas Hospital. Kings Health Partners Academic Health Science Centre., United Kingdom; [2]Clinical Research assistant, Children's Neurosciences, Evelina London Children's hospital @ Guys and St.Thomas Hospital. Kings Health Partners Academic Health Science Centre.., United Kingdom; [3]Consultant, Department of Neuroradiology, Kings College Hospital, Kings Health Partners Academic Health Science Centre, United Kingdom; [4]Consultant, Children's Neurosciences, Evelina London Children's Hospital @ Guys and St.Thomas Hospital. Kings Health Partners Academic Health Science Centre, United Kingdom

Introduction: Optic neuritis could be the first presentation of a range of relapsing demyelinating syndromes. Here, we evaluated if the extent of optic nerve inflammation at first presentation would be predictive of the disease course and visual outcome.

Methods: 17 patients with clinical diagnosis of optic neuritis were identified from a single centre. MRI scans were reviewed by two neuroradiologists, unaware of the final diagnosis, and the inflammation along the anterior visual pathways were scored (0-10; +1 for each segment, orbital, canalicular, intracranial, chiasmal, tract, each eye) as previously described (J Neuro-ophthalmology 2013; 33: 123-7). In 10 patients with optimal orbital imaging, clinical and radiological outcomes were evaluated.

Results: 10 patients (8 Female, median age 11 year; range 5.5-15 yrs) had a median orbital imaging score of 4 (range 2-8). Seven had bilateral involvement and 3 unilateral at outset. The diagnosis at final follow-up (median 22months) was Neuromyelitis optica (2), isolated optic neuritis (5), relapsing remitting multiple sclerosis (1), and polyfocal inflammatory demyelination (2). Patients scoring 5 and above (n=4), showed persistence of signal change on repeat optic nerve and /or brain imaging. One patient scoring 8 had relapsing optic neuritis. Visual outcome was good in patients who did not have a relapsing optic nerve demyelination.

Conclusion: The neuroimaging extend of optic nerve involvement at first presentation may be useful in predicting a relapsing form of demyelination, but larger scale studies are now required to evaluate the utility of this as an early predictor of relapsing variants of optic neuritis or polyfocal demyelination.