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Cognitive Functions of Pediatric Brain Tumor Survivors Treated With Proton Beam Therapy: A Case Series.

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Pediatric brain tumor survivors who received proton beam therapy at the University of Tsukuba Hospital from 2004 to 2011 were retrospectively evaluated for cognitive function. Five patients were included. The median age of diagnosis was 5.4 years (range: 1.5 to 12.5 y) and the median follow-up time was 5.8 years (range: 3.1 to 8.1 y). IQ scores at follow-up were decreased in 2 of 5 patients; 1 underwent whole-brain irradiation and the other was examined just after surgical removal of recurrent tumors. Local proton beam therapy may preserve cognitive function in survivors of pediatric brain tumors.

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