Effects of hydrocephalus after cerebellar tumor: a case-by-case approach.

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Abstract
Although hydrocephalus affects approximately 80% of children with a posterior fossa tumor, its impact on neurodevelopmental outcomes remains unclear. We investigated the effects of hydrocephalus severity on the development of cognitive, motor, academic, and attention skills in 15 children with cerebellar injury after treatment for a tumor sustained during preschool years. Significant impairment was indicated by scores 2 S.D.s or more below the test norm mean. Results indicated substantial intra-individual and interindividual variation, with little consistent influence of hydrocephalus severity on outcomes. Generally, children with moderate hydrocephalus were least impaired, but the child without hydrocephalus performed most poorly. Those who received a shunt generally performed higher on many of the cognitive, but not motor, tests. Thus, when considering differences within and across individuals, neither hydrocephalus severity nor shunt placement alone is a strong predictor of neurodevelopmental outcomes.

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