Long-term outcome of children with acute cerebellitis.

Abstract:
Acute cerebellitis (AC) is characterized by cerebellar symptoms and magnetic resonance imaging (MRI) changes primarily confined to the cerebellum. To analyze the neurological and cognitive long-term outcome of children with AC. Children with AC diagnosed by typical clinical features and MRI findings were included in this retrospective study. Medical charts were reviewed and neurological deficits were assessed by neurological examination or by the expanded disability status scale telephone interview. Cognitive outcome was evaluated with a parental questionnaire (Kognitive Probleme bei Kindern und Jugendlichen). A total of 11 children (6 boys, 5 girls; age range: 3 years to 14 years and 10 months) were included. Of them, six children had a severe disease manifestation including mental status changes and neurological symptoms. Of the rest, two children had a moderate and three children had a mild form of AC. MRI of the cerebellum was obtained in the acute phase revealing signal alterations with different patterns. The average follow-up period was 4 years and 4 months. A complete recovery was observed in five children. Neurological sequelae were reported in five children ranging from ataxia to mild tremor. Cognitive deficits were found in six patients. The affected areas of cognition did include spatial visualization ability, language skills,
and concentration. Neurological and cognitive sequelae are common in children with AC and underline the role of the cerebellum in cognition.