Cerebellar involvement in autism and ADHD

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Abstract

The cerebellum has long been known for its importance in motor learning and coordination. However, increasing evidence supports a role for the cerebellum in cognition and emotion. Consistent with a role in cognitive functions, the cerebellum has emerged as one of the key brain regions affected in nonmotor disorders, including autism spectrum disorder and attention deficit-hyperactivity disorder. Here, we discuss behavioral, postmortem, genetic, and neuroimaging studies in humans in order to understand the cerebellar contributions to the pathogenesis of both disorders. We also review relevant animal model findings.