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The Role of ADHD Associated Genes in Neurodevelopment

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ABSTRACT

Attention deficit hyperactivity disorder (ADHD) is a highly heritable neurodevelopmental disorder of childhood. It is primarily characterised by high levels of activity, inattention, and impulsivity, and has strong negative impacts on academic functioning. Children with ADHD show a reduction in volume, and hypoactivity, in a range of brain regions. The underlying mechanisms behind these phenotypes are unknown, however, variants in several genes with known roles in neurodevelopment are associated with ADHD. In this review we discuss how these ADHD associated genes contribute to neurodevelopment, and how variants in these genes could give rise to the neurological phenotypes seen in ADHD.

Keywords: ADHD, neurodevelopment, synaptogenesis, psychiatric disorder

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