Diagnosis of attention deficit hyperactivity disorder using imaging and signal processing techniques

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Abstract

Attention Deficit Hyperactivity Disorder (ADHD) is the most common childhood psychiatric disorder that may continue through adolescence and adulthood. Hyperactivity, inattention, and impulsivity are the key behavioral features observed in children with ADHD. ADHD is normally diagnosed only when a child continues to have symptoms of hyperactivity, impulsivity, and inattention to a greater degree than the normal for six months or more. In recent years there has been significant research to diagnose ADHD in a quantitative way using medical imaging and signal processing techniques. This paper presents a review of recent research on the diagnosis of ADHD using medical imaging and signal processing techniques. This research is especially valuable for early diagnosis of ADHD.