Attention Deficit Hyperactivity Disorder and Associated Cognitive Dysfunction in Pediatric Epilepsy.

Vidaurre J, Twanow JDE.


Abstract

Attention deficit hyperactivity disorder (ADHD) is the most common neuropsychiatric comorbidity associated with childhood epilepsy, affecting about a third of children with epilepsy. In contrast, ADHD in the general population occurs in 4%-12% of school-aged children. The cause of this association remains unclear. It is likely that common mechanisms underlie the vulnerability for both executive deficits and epileptogenesis. There are characteristics unique to children with ADHD and epilepsy. The inattentive type of ADHD is more prevalent than the combined presentation in children with epilepsy, while the combined type is more common in the general population. Interestingly, there is an equal sex distribution of ADHD in patients with epilepsy, while in the general population, ADHD is 3-7 times more prevalent in boys. Specific features of ADHD seen in different epilepsy syndromes are frequently associated with executive deficits. Early screening of ADHD symptoms in children with epilepsy is essential, as timely interventions can improve academic and social function and outcomes. The mainstays of therapy include behavioral interventions and pharmacotherapy, with evidence demonstrating that stimulants are both safe and effective in children with ADHD and epilepsy.