Systematic review of the screening, diagnosis, and management of ADHD in children with epilepsy. Consensus paper of the Task Force on Comorbidities of the ILAE Pediatric Commission


Epilepsia. 2018 Sep 3.

Abstract

Attention-deficit/hyperactivity disorder (ADHD) is a common and challenging comorbidity affecting many children with epilepsy. A working group under the International League Against Epilepsy (ILAE) Pediatric Commission identified key questions on the identification and management of ADHD in children with epilepsy. Systematic reviews of the evidence to support approaches to these questions were collated and graded using criteria from the American Academy of Neurology Practice Parameter. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) requirements were followed, with PROSPERO registration (CRD42018094617). No increased risk of ADHD in boys with epilepsy compared to girls with epilepsy was found (Level A). Valproate use in pregnancy is associated with inattentiveness and hyperactivity in offspring (1 class I study), and children with intellectual and developmental disabilities are at increased risk of ADHD (Level A). Impact of early seizure onset on development of ADHD was unclear (Level U), but more evident with poor seizure control (Level B). ADHD screening should be performed from 6 years of age, or at diagnosis, and repeated annually (Level U) and reevaluated after change of antiepileptic drug (AED) (Level U). Diagnosis should involve health practitioners with expert training in ADHD (Level U). Use of the Strength and Difficulties Questionnaire screening tool is supported (Level B). Formal cognitive testing is strongly recommended in children with epilepsy who are struggling at school (Level U). Behavioral problems are more likely with polytherapy than monotherapy (Level C). Valproate can exacerbate attentional issues in children with childhood absence epilepsy (Level A). Methylphenidate is tolerated and effective in children with epilepsy (Level B). Limited evidence supports that atomoxetine is tolerated (Level C). Multidisciplinary involvement in transition and adult ADHD clinics is essential (Level U). In conclusion, although recommendations could be proposed for some of the study questions, this systematic review highlighted the need for more comprehensive and targeted large-population prospective studies.