REVIEW

To stop or not to stop? How long should medication treatment of attention-deficit hyperactivity disorder be extended?

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Abstract

ADHD is a common neuropsychiatric disorder with a strong persistence over time. Medication is frequently used in the clinical management of ADHD. After response, medication is typically prescribed for months to years. It is unclear whether extended medication treatment provides long-term benefits and how long it should be continued. Furthermore, there is concern about the long-term safety of ADHD medication. The aim of this systematic review is to address these issues and provide recommendations about the decision to stop or not to stop ADHD medication. We performed a search in PubMed and focused on medication studies with a treatment longer than 12 weeks in subjects 6–18 years old. Extended placebo-controlled double-blind parallel studies are not available. Placebo-controlled discontinuation studies and prospective long-term observational treatment studies provide evidence that medication management leads to a substantial reduction of ADHD symptoms and less impairment of functioning for a period of about 2 years. There is limited and inconsistent evidence for long-term advantage of medication treatment beyond symptom control, such as improved social functioning, academic achievement, employment status and less adverse psychiatric outcome. In terms of safety, long-term effects of medication on growth, blood pressure and heart rate are limited and the occurrence of suicidal, psychotic and manic symptoms is rare. Animal data about neurotoxic effects of psychostimulants cannot be directly extrapolated to humans. Therefore, clinical decisions about starting, continuing, and stopping of ADHD medication should be made on an individual basis. Medication free periods should be implemented at regular times to investigate the need for an...