Primary Care Networks
EDMONTON AND AREA

Evidence-based treatment options for Attention Deficit Hyperactivity Disorder (ADHD)

Guidance for Psychiatrists, Family Physicians, and Nurse Practitioners

Developed by:

MANOR CLINIC

Evidence-based treatment options for Attention Deficit Hyperactivity Disorder (ADHD)

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These recommendations are based on the Canadian ADHD Practice Guidelines, which were published in 2020. The guidelines for diagnosing and treating ADHD are produced and funded by the Canadian ADHD Resource Alliance (CADDRA), a national, independent, not-for-profit association comprised of healthcare professionals across multiple related specialties.

First-Line Treatments

Long-acting psychostimulants are first-line treatment agents. First-line pharmacological treatments for ADHD are medications approved by Health Canada with the best evidence base, risk-benefit profile, effectiveness, and duration of effect. Additionally, sustained-release preparations maintain privacy for patients and families in school, work and social situations. Long-acting ADHD medications use diminishes the need for multiple dosages and augments compliance, symptom coverage and treatment response. In addition, compared to immediate-release psychostimulants, long-acting psychostimulants may decrease diversion and rebound and are often associated with better tolerability. It is important to note that both classes of stimulant medication (methylphenidate and amphetamines) have similar efficacy and tolerability profiles at the population level. CADDRA recommends an adequate trial of both classes of long-acting psychostimulants before engaging in a trial of second-line treatment.

Second-Line Treatments

Atomoxetine, Guanfacine XR and short/intermediate-acting psychostimulants are second-line treatment agents. Second-line treatments are medications approved by Health Canada for treating ADHD but may have a sub-optimal duration of action compared to first-line treatment or reduced tolerability and risk-benefit profile. They can be used for patients who experience significant side effects, have had suboptimal responses with first-time medications, or do not have access to first-line medicines. Non-stimulants may also be used in combination with first-line agents as a potential augmentation for first-line treatment suboptimal responders. Second-line non-stimulant agents are also appropriate where stimulant agents are contraindicated, such as in cases with a high risk of stimulant misuse.

Third-Line Treatments

Bupropion, clonidine, imipramine and modafinil are examples of third-line treatment agents. Atypical antipsychotics are among the agents used for comorbidities commonly seen with ADHD, often in combination with other agents. They are medications whose use is off-label or have higher risks, a higher side-effect profile or a lower efficacy profile. Third-line pharmacological treatments are generally reserved for treatment-resistant cases and may require specialized care.

Exceeding recommended maximum dosages by CADDRA is a third-line treatment option and may be considered after regular dosages of different classes of medicines have been tried.