

ATTENTION-DEFICIT/HYPERACTIVITY DISORDER -ADHD-

General Information Document

Produced by Dr Annick Vincent, Centre médical l'Hétrière, Clinique FOCUS, Québec

Available at: www.attentiondeficit-info.com

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DESCRIPTION

Attention-Deficit/Hyperactivity Disorder is a neurological condition that leads to difficulty controlling and halting ideas (inattention), movement (physical restlessness) and behaviour (impulsivity).

ADHD affects about 5% of children and follow-up studies have shown that symptoms persist into adulthood for more than half of these. A recent U.S. study estimated the prevalence rate of ADHD in the adult population at 4%. ADHD adults suffer above all from cognitive-attention problems (distractibility, mental restlessness), associated disorganization (e.g., procrastination: difficulty beginning and completing tasks, tendency to scatter one's attention, difficulty keeping track of time), and impulsivity. These are as much an impediment at work as in their private life. At times, people suffering from ADHD also have difficulty modulating their emotional responses ("thin-skinned", "hypersensitive", "short-fused"). Often, these individuals will have learned to deal with their physical restlessness by channelling it into their work or through sports. Some will "self-medicate" by taking over-the-counter psychostimulants (e.g., caffeine, nicotine) or illicit drugs obtained on the street (e.g., cannabis, cocaine).

On account of the symptoms and their impact, many persons with ADHD also suffer from poor self-esteem and a chronic sense of under-achievement.

CAUSES

We don't know yet the exact causes of ADHD. However, science shows that ADHD has a genetic component in most cases and can, more rarely, also be tied to the consequences of a neurological condition at an early age (e.g., premature birth, neonatal problem, early neurological disease of an infectious nature, such as meningitis).

ADHD is a neurological condition. It is not caused by a poor upbringing or by psychological stressors. However, one's environment can modulate its expression and course. For example, the presence or absence of help and support to remedy this problem can generate anxiety, undermine self-esteem, and give rise to behaviour problems (e.g., opposition, delinquency).

To explain ADHD, scientists have advanced the hypothesis of a dysfunction at the level of certain information-transmission mechanisms involving neurotransmitters such as dopamine and noradrenaline. To gain a better understanding of the

effects of ADHD, we might compare how information circulates in the brain to a road network. Studies of brain function in persons with ADHD have revealed an impairment of the regions responsible for controlling or inhibiting certain behaviours. In medical jargon, these are referred to as "executive functions". They are what allow, among other things, turning on the engine, breaking, changing directions and prioritizing on the road. In ADHD, the information-transmission network appears to be defective, as though it was lacking traffic lights and road signs and as though the automobiles were equipped with faulty ignition and brake systems.

WHY CONSULT A DOCTOR

Certain persons with ADHD will consult a doctor because they believe they fit the description of the disorder that they read somewhere or someone would have recommended that they consult because of the inattentive, hyperactive or impulsive behaviours they present. Others who have a family member for whom recognition and treatment of ADHD has proved beneficial will seek to determine whether the symptoms that they themselves present can be explained by ADHD and whether available treatment exists. More than half of the adults with ADHD will also develop an associated psychiatric problem like a mood or anxiety disorder, pathological personality traits and drug addiction. This other element is often what drives an individual to consult a doctor.

ASSESSMENT

Just because someone has difficulty concentrating or cannot sit still does not mean that they have ADHD. The only way to determine this for sure is through a diagnostic assessment. This takes the form of a clinical interview during which a physician searches for symptoms specific to ADHD in childhood and subsequently explores whether these symptoms are still present. The clinician, together with the individual, then gauges the extent of the impact on their functioning in order to decide whether treatment is needed and, if so, which sort. Seeking out associated problems and conditions is essential in order to establish an effective, personalized treatment plan.

Neuropsychological evaluations serve to better quantify and qualify the cognitive impairments in order to work on them specifically in therapy or to confirm or exclude other possible diagnoses. However, neuropsychological tests alone do not allow reaching a diagnosis. There is no specific test for ADHD.

TREATMENT

ADHD treatment begins with confirmation of the diagnosis followed by an educational effort. It is essential that the person affected and their family members understand what ADHD is. Often, the mere fact of “finally knowing” is a tremendous relief. Learning techniques for time management, task organization (e.g., memos, agenda, lists) and problem solving is vital for all, but this often requires specialized external help (e.g., psychologist, educator, occupational therapist). Psychotherapeutic support may also be proposed, if needed. The approach must be structured, concrete and applied to daily life (i.e., cognitive-behavioural psychotherapy). Access to specific resources, be it for an assessment or for specialized coaching, is currently being developed in the public healthcare system.

When a person continues to be incapacitated by their ADHD symptoms, medication may be offered. If so, the physician must take into consideration the presence of any associated conditions. Medication acts somewhat like a pair of biological glasses that help improve the brain’s ability to focus. It fosters better information transmission, as though traffic officers were placed at strategic intersections and the ignition and brake systems of automobiles were enhanced.

Standard pharmacological treatment consists in taking psychostimulants, either amphetamine-based (Adderall XR™, Dexedrine™ and a pro-médicament, Vyvanse™) or methylphenidatebased (Biphentin™, Concerta™, Ritalin™). A

non-stimulant drug is also available for ADHD treatment: atomoxetine (Strattera™). Doses must be adjusted progressively under medical supervision. When the right dosage is reached, the clinical response is noticeable within a few days for psychostimulants and within one or more weeks for the non-stimulant. Certain products are short-acting, while others can have an all-day effect.

If a comorbid mood or anxiety disorder is present, it must be taken into account in the treatment plan. Psychostimulants can aggravate certain anxiety disorders. Several antidepressants act on noradrenaline or dopamine and are theoretically of interest for ADHD: bupropion (WellbutrinSR™, WellbutrinXL™ or Zyban™), venlafaxine (EffexorXR™ Pristiq™), duloxetine (Cymbalta™) and mirtazapine (Remeron™). However, few clinical studies have explored the effects of these products specifically for adult ADHD. In the presence of ADHD with comorbid depression or anxiety disorder, physicians could propose a therapeutic trial with such agents before implementing an ADHD-specific treatment. Ideally, the treatment will then consist of a single agent or a mix of these aimed at achieving the utmost efficacy and the least possible adverse effects.

These pharmacological ADHD treatments have an efficacy rate of 50% to 70%. Although these are generally well tolerated, all drugs can produce side effects. Discuss any treatment being considered beforehand with your doctor or pharmacist.

Drugs used in ADHD treatment in Canada

AMPHETAMINE-BASED PSYCHOSTIMULANTS

Adderall XR™

Format: 5, 10, 15, 20, 25, 30 mg capsules

(can be opened and sprinkled onto food)

Duration of action: 12 hours

Dexedrine™

Format: 5 mg tablets; 10, 15 mg spansules

Duration of action: 3-4 hours (tablets) ; 6-8 hours (spansules)

Vyvanse™

Format: 30, 50 mg capsules

(can be opened and diluted into water)

Duration of action: 13-14 hours

METHYLPHENIDATE-BASED PSYCHOSTIMULANTS

Biphentin™

Format: 10, 15, 20, 30, 40, 50,

60, 80 mg capsules

(can be opened and sprinkled onto food)

Duration of action: 10-12 hours

Concerta™

Format: 18, 27, 36, 54 mg capsules

Duration of action: 12 hours

Ritalin™

Format: 10, 20 mg tablets

Duration of action: 3-4 hours

NON-PSYCHOSTIMULANT

Strattera™

Format: 10, 18, 25, 40, 60 80 and 100 mg capsules

Duration of action: All day

SUPPORT AND MORE INFORMATION

Go to www.attentiondeficit-info.com for a list of ADHD Support Groups and other information including scores of interesting tools, books, DVDs and links to various websites.

List of Resources -ADHD-

Go to www.attentiondeficit-info.com for a list of ADHD Support Groups and other information including scores of interesting tools, books, DVDs and links to various websites like:

Websites –English-

- www.add.org
- Attention Deficit Disorder Association (ADDA)
- www.addvance.com
- Answers to Your Questions about ADD (ADHD)
- www.addwarehouse.com
- Online catalogue of ADHD resources
- www.attentiondeficit-info.com
- Dr Annick Vincent's ADHD website
- www.caddac.ca
- Centre for ADD/ADHD Advocacy, Canada
- www.caddra.ca
- Canadian ADHD Resource Alliance
- www.chadd.org
- Children and Adults with Attention Deficit/Hyperactivity Disorder (CHADD)
- www.myadhd.com
- Connecting Doctors, Parents and Teachers
- www.skoach.com
- www.totallyadhd.com

Canadian DVDs on ADHD

- ❖ *Portrait of Attention Deficit / Hyperactivity Disorder*
Dr. Annick Vincent and the Teaching Board of ISMQ (2007);
Quebec City (418-663-5146)
Enseignement_CHRG@ssss.gouv.qc.ca
- ❖ *ADHD Across The Lifespan*
Timothy S. Bilkey, Bilkey Adult ADHD Clinic, Barrie, Ontario;
www.bilkeyadhdclinic.com

Books

- ❑ Adler, L. and Florence, M. (2006) *Scattered Minds: Hope and Help for Adults with ADHD*, New York: Putnam.
- ❑ Barkley, R. A. (1997). *ADHD and the nature of self control*. New York: Guilford Press.
- ❑ Barkley, R. A. (2000). *Taking Charge of ADHD: The Complete Authoritative Guide for Parents*. New York: Guilford Press.
- ❑ Barkley, R. A. (2005). *Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*. New York: Guilford Press.
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- ❑ Brown, T. E. (2000). *Attention-Deficit Disorders and Comorbidities in Children, Adolescents and Adults*. Washington DC: American Psychiatric Press.
- ❑ Brown, T. E. (2005) *Attention Deficit Disorder: the Unfocused Mind in Children and Adults*. New Haven, CT: Yale University Press
- ❑ Goldstein, S., and Ellison, A. T. (2002). *Clinician's Guide to Adult ADHD, Assessment and Intervention*. New York: Academic Press.
- ❑ Hallowell, E. M., and Ratey, J. J. (2005). *Delivered from Distraction*. New York:: Ballantine Books.
- ❑ Hallowell, E. M., and Ratey, J. J. (1995). *Driven to Distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood through Adulthood*. New York: Simon & Schuster.
- ❑ Hallowell, E. M., and Ratey, J. J. (1996). *Answers to Distraction*. New York: Bantam Books.
- ❑ Kelly, K., and Ramundo, P. (1996). *You Mean I'm not Lazy, Stupid or Crazy?* A Fireside Book. New York: Simon & Schuster.
- ❑ Kolberg, J and Nadeau, K.G. (2002) *ADD-Friendly ways to Organize Your Life*. New York: Routledge
- ❑ Kutscher M. L. (2003) *ADHD Book: Living Right Now! White Plains*, New York: Neurology Press
- ❑ Nadeau, K. G. (1995). *A Comprehensive Guide to Attention Deficit Disorder in Adults: Research-Diagnosis-Treatment*. New York: Brunner/Mazel.
- ❑ Nadeau, K. G. (1996). *Adventures in Fast Forward: Life, Love and Work for the ADD Adult*. New York: Brunner/Mazel.
- ❑ Nadeau, K. G. (1997). *ADD in the Workplace: Choices, Changes and Challenges*. New York: Brunner/Mazel.
- ❑ Nadeau, K. G., Littman, E. B., and Quinn, P. (1999). *Understanding Girls with AD/HD*. Silver Spring: Advantage Books.
- ❑ Nadeau, K. G., Littman, E. B., and Quinn, P. (2002). *Understanding Women with AD/HD*. Silver Spring: Advantage Books.
- ❑ Nadeau, K. (1998) *Help4ADD@High School*. Silver Spring : Advantage Books
- ❑ Nadeau, K.G. (2006) *Survival Guide for College Students with ADHD or LD*. New York: Magination Press
- ❑ Pera G. (2008) *Is it You, Me, or Adult ADD? Stopping the Roller Coaster When Your Partner has -- Surprise! -- Attention Deficit Disorder*, San Francisco, 1201 Alarm Press.
- ❑ Phelan, T. W. (2003). *1-2-3 Magic*. Glen Ellyn, Illinois: Parent Magic inc.
- ❑ Phelan, T. W. (2000). *All about Attention Deficit Disorder: Symptoms, Diagnosis and Treatment: Children and Adults*. Glen Ellyn, Illinois: Parent Magic inc.
- ❑ Pinsky S. C., (2006) *Organizing Solutions for People with Attention Deficit Disorder-Tips and Tools to Help you Take Charge of Your Life and Get Organized*, Gloucester, Fair Winds Press.
- ❑ Quinn P.O., Ratey N.A., Maitland T.L. (2000) *Coaching College Students with AD/HD, Issues and Answers*. Washington D.C. : Advantage Books
- ❑ Ramsay, J.R., Rostain A.L. (2007) *Cognitive-Behavioral Therapy for Adult ADHD: An Integrative Psychosocial and Medical Approach*, New York: Routledge
- ❑ Safren, S. A., Perlman C.A., Sprich S., Otto, M. W. (2005) *Mastering Your Adult ADHD, A Cognitive Behavioral Treatment Program, Therapist Guide*, New York: Oxford.
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- ❑ Tuckman, A. (2009) *More Attention, Less Deficit: Success Strategies for Adults with ADHD*, Specialty Press/A.D.D. Warehouse, U.S.
- ❑ Vincent, A. (2008). *My Brain Needs Glasses: Living with Hyperactivity*. Québec: Impact!Éditions. French version available: *Mon cerveau a besoin de lunettes*. Vincent, A. (2010) Montreal, Quebecor.
- ❑ Vincent, A. (2008). *My Brain Still Needs Glasses: AD/HD in Adults*. Québec: Impact!Éditions. French version available: *Mon cerveau a encore besoin de lunettes: Vivre avec l'hyperactivité* Vincent, A. (2009) Québec: Impact!Éditions.
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