

ADHD in Adults: Evaluation and Management in Primary Care

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Objectives

Initial Evaluation

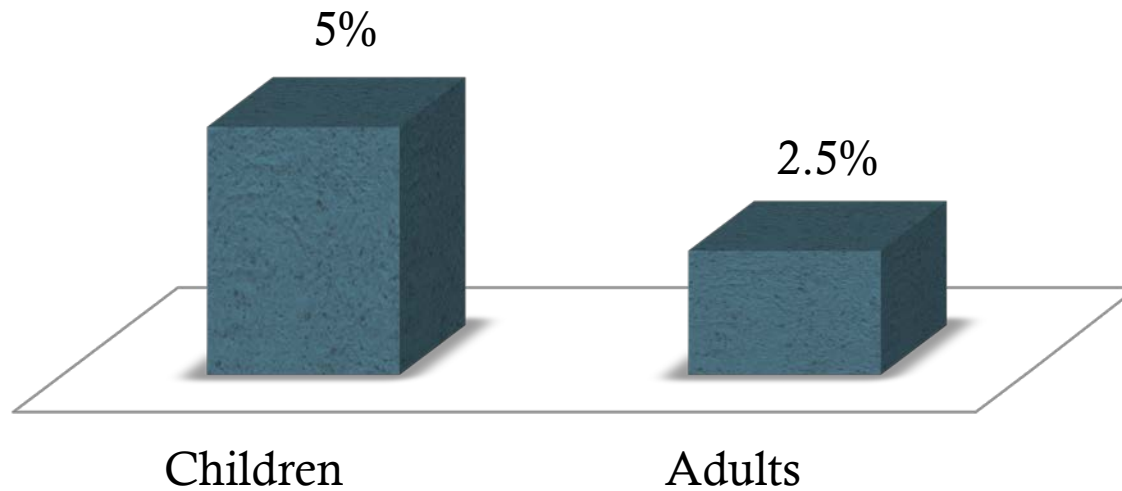
Specific Adult Manifestations

Differential Diagnosis

Treatment Considerations

Epidemiology of ADHD

ADHD Prevalence



Initial Presentations in Adults

Timing – why now?



Common red flags



Risks of Not Treating

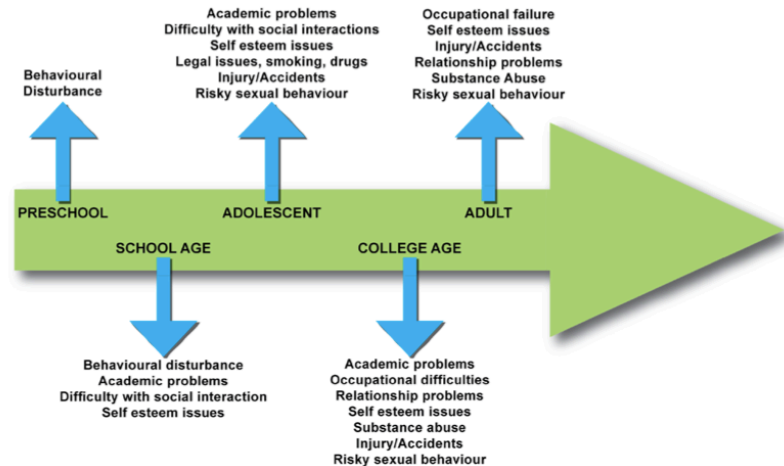
Physical health risks

Comorbid mental health disease

Occupational & financial losses

Relationship impacts

Figure 3.1 Developmental Impact of ADHD



Attention-Deficit/Hyperactivity Disorder

Diagnostic Criteria

A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by (1) and/or (2):

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

- a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
- b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).

- h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

2. Hyperactivity and impulsivity: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

- a. Often fidgets with or taps hands or feet or squirms in seat.
- b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- c. Often runs about or climbs in situations where it is inappropriate. (**Note:** In adolescents or adults, may be limited to feeling restless.)
- d. Often unable to play or engage in leisure activities quietly.
- e. Is often “on the go,” acting as if “driven by a motor” (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- f. Often talks excessively.
- g. Often blurts out an answer before a question has been completed (e.g., completes people’s sentences; cannot wait for turn in conversation).
- h. Often has difficulty waiting his or her turn (e.g., while waiting in line).
- i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people’s things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.

C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).

D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).

Specify whether:

314.01 (F90.2) Combined presentation: If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.

314.00 (F90.0) Predominantly inattentive presentation: If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.

314.01 (F90.1) Predominantly hyperactive/impulsive presentation: If Criterion A2 (hyperactivity-impulsivity) is met and Criterion A1 (inattention) is not met for the past 6 months.

Specify if:

Specify current severity:

Mild: Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in no more than minor impairments in social or occupational functioning.

Moderate: Symptoms or functional impairment between “mild” and “severe” are present.

Severe: Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning.

Diagnosing ADHD

>5 sx

> 6 mo

Inattention	Hyperactivity
Makes careless mistakes	Fidgets
Difficulty with sustained attention	Leaves seat despite expectations
Seems to not listen when spoken to directly	Feels restless (or runs/climbs inappropriately)
Trouble completing tasks	Cannot play quietly
Difficulty organizing tasks/activities	Uncomfortable still, appears driven by a motor
Avoids sustained mental effort	Talks excessively
Loses important items	Answers before question complete
Distracted by extraneous stimuli	Difficulty waiting turn
Forgetful in daily activities	Interrupts or intrudes

Several
since 12yo

2+
settings

Screening Tools

Adult ADHD Self-Report Scale

Wender Utah Rating Scale for Attention Deficit Hyperactivity Disorder

ADULT ADHD SELF-REPORT SCALE (ASRS-V1.1) SYMPTOM CHECKLIST

Patient: _____

Date Completed: _____

Please answer the questions below, rating yourself on each of the criteria shown using the scale on the right side of the page. As you answer each question, place an X in the box that best describes how you have felt and conducted yourself over the past 6 months. Please give this completed checklist to your healthcare professional to discuss during your appointment.	Never	Rarely	Sometimes	Often	Very often
PART A					
How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?					
How often do you have difficulty getting things in order when you have to do a task that requires organization?					
How often do you have problems remembering appointments or obligations?					
When you have a task that requires a lot of thought, how often do you avoid or delay getting started?					
How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?					
How often do you feel overly active and compelled to do things, like you were driven by a motor?					
PART B					
How often do you make careless mistakes when you have to work on a boring or difficult project?					
How often do you have difficulty keeping your attention when you are doing boring or repetitive work?					
How often do you have difficulty concentrating on what people say to you, even when they are speaking to you directly?					
How often do you misplace or have difficulty finding things at home or at work?					
How often are you distracted by activity or noise around you?					
How often do you leave your seat in meetings or in other situations in which you are expected to stay seated?					
How often do you feel restless or fidgety?					
How often do you have difficulty unwinding and relaxing when you have time to yourself?					
How often do you find yourself talking too much when you are in social situations?					
When you're in a conversation, how often do you find yourself finishing the sentences of the people you are talking to, before they can finish if themselves?					
How often do you have difficulty waiting your turn in situations when turn taking is required?					
How often do you interrupt others when they are busy?					

Wender Utah Rating Scale (WURS)

Patient's Name: _____ Date: _____

Wender Utah Rating Scale

- 61 questions answered by the adult patient recalling his or her childhood behavior
- 5 possible responses scored from 0 to 4 points

	Not at all or very slightly	Mildly	Moderately	Quite a Bit	Very much
AS A CHILD I WAS (OR HAD):					
1. Active, restless, always on the go	0	1	2	3	4
2. Afraid of things	0	1	2	3	4
3. Concentration problems, easily distracted	0	1	2	3	4
4. Anxious, worrying	0	1	2	3	4
5. Nervous, fidgety	0	1	2	3	4
6. Inattentive, daydreaming	0	1	2	3	4
7. Hot or short tempered, low boiling point	0	1	2	3	4
8. Shy, sensitive	0	1	2	3	4
9. Temper outbursts, tantrums	0	1	2	3	4
10. Trouble stick-to-it-ivenessing, not following through, failing to finish things started	0	1	2	3	4
11. Stubborn, strong willed	0	1	2	3	4
12. Sad or blue, depressed, unhappy	0	1	2	3	4
13. Uncautious, dare-devilish, involved in pranks	0	1	2	3	4
14. Not getting a kick out of things, dissatisfied with life	0	1	2	3	4
15. Disobedient with parents, rebellious, sassy	0	1	2	3	4
16. Low opinion of myself	0	1	2	3	4
17. Irritable	0	1	2	3	4
18. Outgoing, friendly, enjoy company of people	0	1	2	3	4
19. Sloppy, disorganized	0	1	2	3	4
20. Moody, have ups and downs	0	1	2	3	4
21. Feel angry	0	1	2	3	4
22. Have friends, popular	0	1	2	3	4
23. Well organized, tidy, neat	0	1	2	3	4
24. Acting without thinking, impulsive	0	1	2	3	4
25. Tend to be immature	0	1	2	3	4
26. Feel guilty, regretful	0	1	2	3	4
27. Lose control of myself	0	1	2	3	4
28. Tend to be or act irrational	0	1	2	3	4
29. Unpopular with other children, didn't keep friends for long, didn't get along with other children	0	1	2	3	4
30. Poorly coordinated, did not participate in sports	0	1	2	3	4

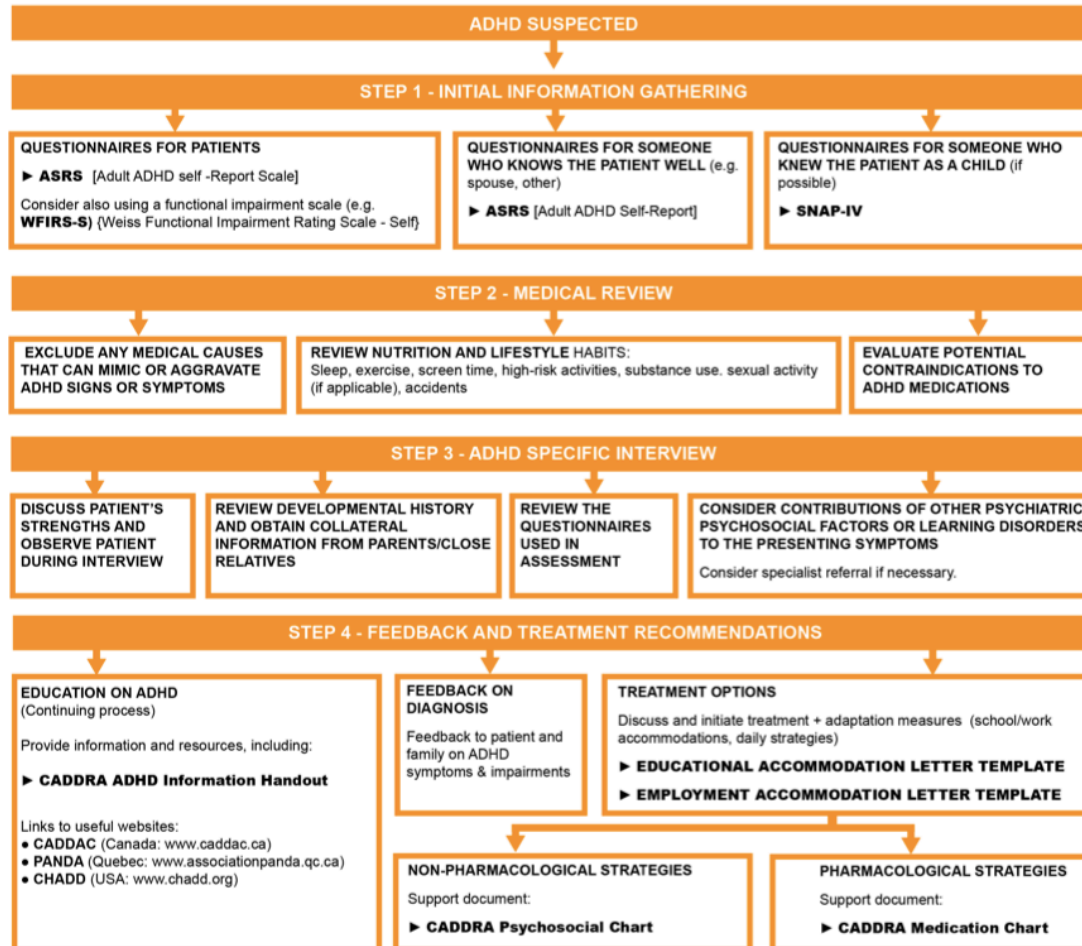
	Not at all or very slightly	Mildly	Moderately	Quite a Bit	Very much
31. Afraid of losing control of self	0	1	2	3	4
32. Well coordinated, picked first in games	0	1	2	3	4
33. (for women only) Tomboyish	0	1	2	3	4
34. Ran away from home	0	1	2	3	4
35. Get in fights	0	1	2	3	4
36. Teased other children	0	1	2	3	4
37. Leader, bossy	0	1	2	3	4
38. Difficulty getting awake	0	1	2	3	4
39. Follower, lead around too much	0	1	2	3	4
40. Trouble seeing things from someone else's point of view	0	1	2	3	4
41. Trouble with authorities, trouble with school, visits to principal's office	0	1	2	3	4
42. Trouble with the police, booked, convicted	0	1	2	3	4
MEDICAL PROBLEMS AS A CHILD:					
43. Headaches	0	1	2	3	4
44. Stomachaches	0	1	2	3	4
45. Constipation	0	1	2	3	4
46. Diarrhea	0	1	2	3	4
47. Food allergies	0	1	2	3	4
48. Other allergies	0	1	2	3	4
49. Bedwetting	0	1	2	3	4
AS A CHILD IN SCHOOL:					
50. Overall a good student, fast	0	1	2	3	4
51. Overall a poor student, slow learner	0	1	2	3	4
52. Slow reader	0	1	2	3	4
53. Slow in learning to read	0	1	2	3	4
54. Trouble reversing letters	0	1	2	3	4
55. Problems with spellin	0	1	2	3	4
56. Trouble with mathematics or numbers	0	1	2	3	4
57. Bad handwriting	0	1	2	3	4
58. Though I could read pretty well, I never really enjoyed reading	0	1	2	3	4
59. Did not achieve up to potential	0	1	2	3	4
60. Repeated grades (which grades?) _____	0	1	2	3	4
61. Suspended or expelled (which grades?) _____	0	1	2	3	4

Wender Utah rating scale subscore = _____ (sum of 25 questions associated with ADHD)

Interpretation:

- minimum score for the 25 questions is 0
- maximum score 100
- if a cutoff score of 46 was used 86 of patients with ADHD 99 of normal persons and 81% of depressed subjects were correctly classified

Outline of Clinical Work Up



The Interview

DIVA 2.0

**Diagnostic Interview for ADHD
in adults (DIVA)**

Differential Diagnosis

Anxiety

Depression

OSA

Anemia

Hearing or vision impairment

Thyroid

Hypoglycemia

Sleep disorders

Medications with cognitive dulling (mood stabilizers) or psychomotor activation (decongestants)

Substance use disorder

Personality disorders

PTSD

Epilepsy

Traumatic brain injury

Cognitive impairment/dementia

Comorbid Conditions

- 70% of children have at least 1 other psychiatric disorder – anxiety, ODD, OCD, tic, depression
- 85% of adults have comorbid condition

Treatment Approaches

- Identify specific areas to of improvement
- Psychosocial treatment
- Pharmacologic Treatment
- School and work accommodations

Non-Pharmacologic Treatments

- Therapies
 - Cognitive behavioral therapy
 - Behavioral Interventions
 - Social Skills Training
 - Coaching
 - Emotional Dysregulation
- School and Work Accommodations
 - CADDRA website has example letters
- Balanced Lifestyle
 - Sleep Hygiene
 - Meals
 - Regular Exercise

Home Strategies

Environmental

- Structure and routine are essential. Parents/partners must be united, consistent, firm, fair and follow through
- Encourage prioritizing instead of procrastination
- Post visual reminders (rules, lists, sticky notes, calendars) in prominent locations
- Use timers/apps for reminders (homework, chores, limiting electronics, paying bills)
- Keep labeled, different coloured folders or containers in prominent locations for items (keys, electronics).
- Find the work area best suited to the individual (dining table, quiet area)
- Break down tasks
- Allow movement breaks
- Allow white noise (fan, background music) during homework or at bedtime

Celebrate Successes

Meditation/Relaxation
Techniques

Mindfulness Training

Workplace Strategies



Difficulties with Attention Regulation

- Address difficult tasks during the time of day when most alert.
- Reminder (visual or auditory) to draw person back “to task”.
- Use of a timer to define periods of concentration on a specific task.
- Mundane and boring tasks rotated with stimulating tasks.
- Use of *intrusive* reminders (that are difficult to ignore and require attention to deactivate) for meeting and appointments.
- Note taking for lengthy instructions.
- Use of audio recorder during meetings.
- Distribute tasks amongst employees with consideration of job requirements as well as individual strengths and interests (for example, delegate some of the more menial tasks to an employee who prefers detail orientation work).
- Limit continuous e-mail checking unless required.
- Scheduled blocks of uninterrupted time during the day where the phone is set on do not disturb and e-mail notifications are blocked
- Manager/coworkers to provide a 5 to 10 minute warning when switching of focus required.
- When possible, plan ahead for the time and resources for work to be reviewed for details with managers or co-worker.
- Intrusive thoughts or ideas written down so they do not intrude on attention to task.

Workplace Strategies

Hyperactivity

Distractibility

Impulsivity

Time Management Impairments

Organization difficulties

Difficulties with Attention Regulation

Procrastination

Forgetfulness

Emotional Dysregulation and difficult relationships with co-workers

Resources for Patients

- CADDAC – Center for ADHD Awareness, Canada www.caddac.ca
- CH.A.D.D. – Children and Adults with ADD www.chadd.org
- Attention Deficit Information <http://www.attentiondeficit-info.com/adhd>
- Attention Deficit Disorder Association www.add.org
- ADHD Coach 4 You www.addcoach4u.com
- ADDitude Magazine www.additudemag.com
- ADHD in Adults website www.adhdinadults.com

Psychosocial Resources

- Anxiety BC tools and resources:
<https://www.anxietybc.com/tools>
- Relaxation handout:
<http://www.getselfhelp.co.uk/docs/Relaxation.pdf>
- Organizational apps: Todoist, Evernote, Omnifocus
- Productivity websites: 43 folders <https://colterreed.com/how-to-clear-your-desk-and-your-mind-with-43-folders/>,
zenhabits.net
- Time Management: planner, phone applications, inspiration, dragon/ipad dictation, notability, concept mapping

Pharmacologic Treatment

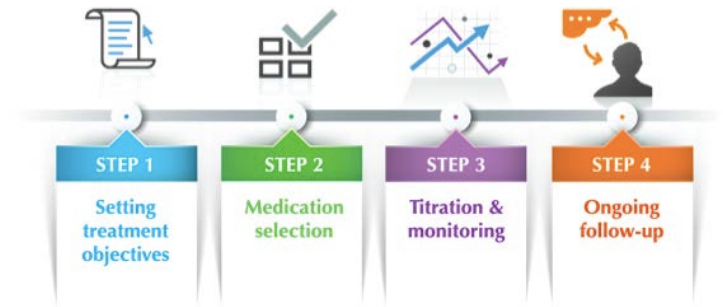
Brand Name	Active Ingredient	Starting Dose	Titration/wk	Max Dose
First Line Agents – Long-acting psychostimulants				
Adderall XR	Amp. mixed salts	20mg daily	10mg daily	60mg
Vyvanse	Lisdexamfetamine	30mg daily	10-20mg daily	70mg
Ritalin LA	Methylphenidate	10-20mg daily	10mg daily	100mg
Concerta	Methylphenidate	18-36mg daily	18mg daily	72mg
Focalin XR	Dexmethylphenidate	10mg daily	10mg daily	40mg
Second Line/Adjunctive Agents – Short-acting psychostimulants				
Dexedrine	Dextroamphetamine	5mg BID	5mg daily	60mg total
Ritalin	Methylphenidate	10mg BID	5-10mg daily	60mg total
Adderall	Amp. mixed salts	5mg BID	5-10mg daily	60mg total
Second Line/Adjunctive Agents – Long-acting non-psychostimulants				
Strattera	Atomoxetine	40mg daily	20-40mg daily	100mg
Third Line Agents – Anti-depressants/anti-hypertensives				
Bupropion, Nortriptyline, clonidine, modafinil				

Initiating Therapy

Identify treatment SMART goals

Start with first line therapies

- Titrate
- Monitor for contributing factors
- Switch within 1st line therapies
- Trial adjunctive, 2nd line therapies

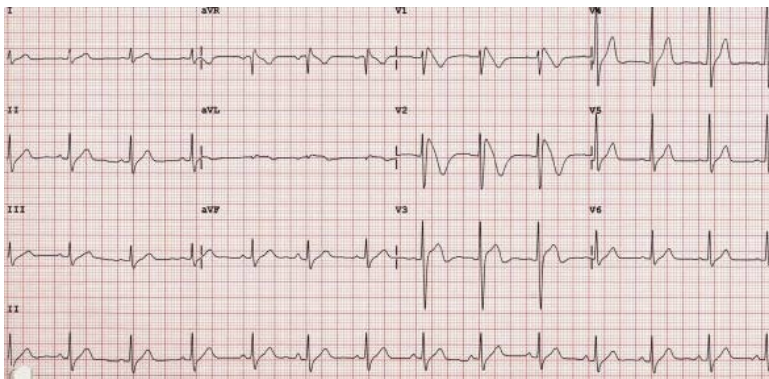


Side Effects of Medications

Common Side Effects

Serious Side Effects

Contraindications



CONTRAINDICATIONS TO PSYCHOSTIMULANTS*

- Treatment with MAO inhibitors and for up to 14 days after discontinuation
- Symptomatic cardiovascular disease
- Glaucoma
- Advanced arteriosclerosis
- Untreated hyperthyroidism
- Known hypersensitivity or allergy to the products
- Acute psychiatric conditions such as mania or psychosis
- Moderate to severe hypertension

Contraindications to Atomoxetine (Strattera)

- Treatment with MAOI and for up to 14 days after discontinuation
- Narrow angle glaucoma
- Uncontrolled hyperthyroidism
- Pheochromocytoma
- Moderate to severe hypertension
- Symptomatic cardiovascular disease
- Severe cardiovascular disorders
- Advanced arteriosclerosis
- Known hypersensitivity or allergy to the products

Changing and Stopping Therapy

Anticipate, identify, and treat side effects

Can discontinue abruptly (except alpha-2 agonists)

Sources

ADHD Medications and Risk of Serious Cardiovascular Events In Young and Middle-Aged Adults Laurel A. Habel, William O. Cooper, Colin M. Sox, K. Arnold Chan, Bruce H. Fireman, Patrick G. Arbogast, T. Craig Cheetham, Virginia P. Quinn, Sascha Dublin, Denise M. Boudreau, Susan E. Andrade, Pamala A. Pawloski, Marsha A. Raebel, David H. Smith, Ninah Achacoso, Connie Uratsu, Alan S. Go, Steve Sidney, Mai N Nguyen-Huynh, Wayne A. Ray, Joe V. Selby

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