ADULT ADHD

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Learning Objectives

1. Understand how the clinical presentation of ADHD differs in childhood and adulthood.
2. Select a medication to treat ADHD in an adult patient considering cardiovascular risk, diversion potential, and other co-morbidities.

ADHD Clinical Presentation

Table 1. Classic Presenting Features of Attention-Deficit/Hyperactivity Disorder in School-Aged vs Adolescent Populations[5-7]

Symptom	School-Aged Children	Adolescents and Adults
Inattention	• Difficulty sustaining attention (except to video games) • Does not listen • Difficulty following multistep directions • Loses things, such as school materials, has a messy locker, book bag, or desk • Easily distracted or forgetful	• Difficulty sustaining attention to reading or paperwork • Poor level of concentration • Difficulty finishing tasks • Misplaces things, such as wallets, keys, or mobile telephones, has poor time management, works twice as hard for half as much • Easily distracted or forgetful; may seem scattered at home or work
Hyperactive-impulsive	• Squirms and fidgets • Runs or climbs excessively • Cannot play or work quietly • Talks excessively • On the go, driven by "a motor" • Blurts out answers • Cannot wait his/her turn • Intrudes on or interrupts others	• Inner restlessness • Fidgets when seated (eg, drums fingers, taps foot, flips pens) • Easily overwhelmed • Talks excessively • Self-selects active jobs or activities • Makes impulsive decisions • Drives too fast, takes impulsive risks • Often irritable or quick to anger
Dysfunction at school	• Difficulty sitting still • Easily overwhelmed • Easily bored • Speaks out in class	• Teachers complain about inattention, lack of motivation, or being overly social • Procrastination • Missing assignments, poor test grades • Grades fall and avoids or cuts class or school

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Adult ADHD Presentation

- How symptoms may manifest
  - Poor executive functioning
  - Chaotic lifestyle
  - Challenges parenting
  - Strained or failed relationships
  - Recurrent job turnover or loss
  - High risk behaviors
  - Legal difficulties
  - Substance abuse

Patient Case

RA is a 38 yo male who comes to see his primary care provider because he thinks he needs medication for ADHD. He was treated for ADHD with stimulants through high school, but was able to stop once he graduated. He had been working as a landscaper but recently decided to go back to college for a degree.

His classes are going okay, but he often feels overwhelmed. He seems to have trouble keeping straight when various assignments and readings are due. He usually tries to take good notes in class, but often finds his mind wandering.

Considerations in Treating Adult ADHD?

Efficacy / Adherence

- Stimulants and atomoxetine first-line (expected efficacy)
- Longer acting agents preferred (all day coverage)
- Antidepressants or atomoxetine preferred if psychiatric co-morbidities (anxiety, depression)
- Alpha-2 agonists rarely used

Safety / Tolerability

- Increased risk of co-morbid cardiovascular conditions may limit stimulant and atomoxetine use
- Vyvanse, atomoxetine or antidepressants may be preferred due to increased risk of substance abuse and diversion in adults

Patient Case

At home RA reports that his wife gets annoyed with him because he often forgets errands he promised to run. He will impulsively start various projects around the house, but never seems to finish them. When it's his turn to get the kids to school in the morning he struggles to get them organized and to there on time. Often they need to go back because someone left something important at home (homework, lunch, jacket, etc.).

Medical Conditions: HTN, depression, hx AODA

Medications: fluoxetine 40mg daily, HCTZ 25mg daily

SH: 1-2 beers on weekends, no smoking, hx cocaine use

Vitals: BP 138/79 HR 74 Wt 183lbs Ht 5'10"

Patient Case

RA's PCP diagnoses him with ADHD and would like to initiate medication therapy today.

Based on the information provided which medication recommendation is most appropriate for RA?

A. Atomoxetine
B. Vyvanse
C. Ritalin
D. Bupropion

Answers

- **Options A, B and D all represent valid treatment options. Some considerations in selecting between these agents include:**
  - Interaction between fluoxetine and atomoxetine: fluoxetine is a strong CYP2D6 inhibitor and therefore can reduce the metabolism of atomoxetine. Atomoxetine should be dose adjusted as follows: adults: initial dose, 40 mg/day ORALLY; increase to 80 mg/day only if symptoms do not improve after 4 weeks and the initial dose is well tolerated
  - Among stimulants, Vyvanse has a lower risk for abuse for purposes of getting high. May be a decent option in this patient if his hx of AODA is remote with low risk of relapse. Vyvanse also has a long duration of action and therefore may be beneficial in an adult patient with a long workday.
  - Wellbutrin has a lower level of evidence in treating ADHD, but may be helpful as adjuvant for depression tx as well. Worthwhile to evaluate how well depression is currently being controlled with fluoxetine.

- **Option C:** Would avoid short-acting stimulants like Ritalin in this patient based on AODA history and higher potential of short-acting stimulants to be abused for purposes of getting high. Also it is unlikely to have a long enough duration of action to provide the entire day coverage needed for an adult patient, and would be inconvenient to have to dose multiple times per day.

Questions??

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