

Dopamine Dilemmas

Medication Management in Complex ADHD

Presented at CHADD International Conference
November 15, 2024

Jess Levy, MD
Drlevy@Apluspsychiatry.com

Disclosures

- Dr. Levy is the proud owner of A+ Psychiatry, LLC. He is not receiving or providing any material compensation related to his ownership of A+ Psychiatry in connection with this presentation or the activities surrounding it.
- Dr. Levy received a one-time stipend in 2023 from Corium in anticipation of a paid speaking opportunity. He is not affiliated with Corium and received no additional compensation.

Disclaimers

This presentation will discuss the off-label use of medications, which are uses not approved by the U.S. Food and Drug Administration.

Dr. Levy makes every effort to use generic drug names and to provide unbiased, evidence-based recommendations. Brand names when used, are for educational and clarification purposes only.

This presentation is NOT medical advice. This information is provided for educational purposes only and does not constitute an endorsement or recommendation. Please consult with a healthcare professional before making any changes to your medical treatment.

Objectives

1. Assess the current prescribing atmosphere for as it pertains to treating ADHD/ADD.
2. Compare strategies to mitigate challenges associated with stimulant medication shortages and affordability.
3. Design comprehensive treatment plans that prioritize the safe, efficient, and sustainable use of ADHD medication in combination with other treatments.

Overview

1. Introduction - Sustainable treatment
2. Stimulant shortages
3. Side effects
4. Complex ADHD

We will **zoom** through the slides then go back to answer follow-up questions.

That's a lot to cover in a short amount of time!



Source:
unknown

Sustainable treatment

- Consistent - Continuous, stable access to treatment
- Safe - Short term, long term safety
- Economical - Affordable

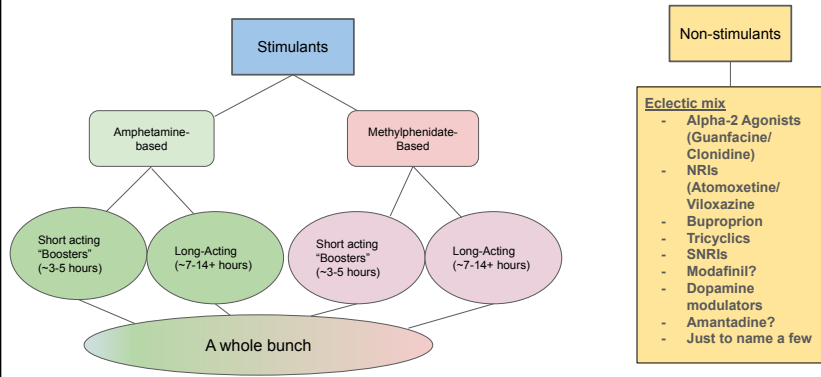


Source: News Medical

Sustainable treatment requires thought

- Balancing individual needs with the evidence base
- Understanding of how the medication works and is metabolized
- Consideration of lifestyle, values, activities
- Holistic approach
- Preventive
- Education

A very broad overview of ADHD Meds



Medication shortages



Source: Reddit (Unknown creator)

Medication shortages (overview)

- Multifactorial problem
- Check with other pharmacies - Ask nicely :)
- Changing to a different strength that is available
- Switching to a brand-name alternative that is in stock, using a copay card
- Switching to a lesser-known generic equivalent
- Switching to a short-acting stimulant with pulse dosing* (more on this later)
- Augmentation with non-stimulants
- Partial fills
- Be proactive

Three less commonly used generic psychostimulants:

Amphetamine-based:

- Dextroamphetamine
 - Brand name equivalent: Dexedrine®
 - Similar molecule to Lisdexamfetamine (Brand name: Vyvanse®)
 - Long and shorting acting versions
 - If converting from mixed amphetamine salts (brand name: Adderall®), reduce dosage by 25%

Methylphenidate-based:

- Methylphenidate ER (50/50 Long acting: Short acting)
 - Brand name equivalent: Ritalin LA®
- Methylphenidate ER (70/30 Long acting: Shorting acting)
 - Brand name equivalent: Metadate CD® (capsules) / Metadate ER® (Tablet)

Pulse dosing: Smaller doses of immediate release (IR) stimulants dosed throughout the day.



Pros: Flexibility

- Less shortages of IR meds
- Cheap
- Pills can be split to make half-doses
- Tailored to a person's schedule
- Allows for breaks for meals and snacks

Cons: Inconvenient

- Pill burden
- Have to remember to take the med
- Higher potential for misuse, addiction, and diversion
- Administering at school / work

On the pharmacy side: Practical tips

- Be proactive - Know when you will run out and refill medication as soon as you're eligible for a refill (though please avoid stockpiling meds)
- Partial fills - Picking up less than a 30 day supply. Anticipate needing a new prescription for the remaining (unfilled) quantity.
- If using a copay card for a brand-name alternative make sure pharmacy has this information beforehand.
 - By default, some pharmacies won't fill the med if a prior authorization is needed, even if the copay card covers it without a prior authorization. Specifically ask the pharmacist to try the copay card even if not approved.
 - Utilize the copay card patient support line for specific roadblocks.

On the pharmacy side: Practical tips - Continued

- Check with local large medical center pharmacies
- Check Warehouse club pharmacies like Costco, Sam's Club, BJ's, etc.
- Can you make, or at least approximate the daily dosage using a different strength that is in stock?
- BE NICE - Try your best to keep your rejection sensitivity at bay ;)

Managing side effects



Managing side effects (overview)

- Having realistic expectations
- "Stimulants stimulate"
- Is it really a side effect?
- Pay attention to the timing of symptoms
- Dosing matters
- Just how bad is the problem?

Specific Strategies for side effects

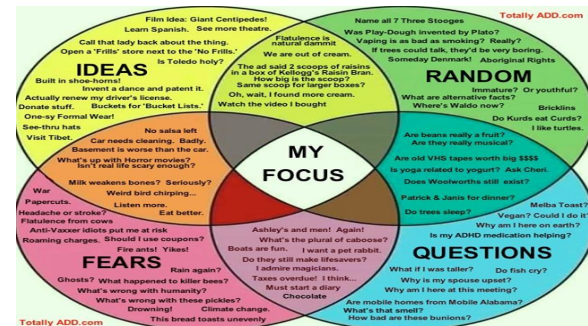
- Irritability
 - Timing: Peak dose effect vs come down vs under-treated
 - Hangry and tired
 - May be due to undertreated ADD/ADHD
- Low appetite
 - "Pulse dosing"
 - Comfort food / nutrition shakes
 - Medications to increase appetite (Mirtazepine, Cyproheptadine)
 - Stay hydrated
 - Primary care for specific nutrition recommendations
- Insomnia
 - Timing of medication
 - Food / hydration
 - Non-stimulants
 - Sleep aids

Combo therapy: Psychostimulant + Alpha-2 Agonist (Guanfacine / Clonidine)

- Synergistic
- Might be able to get away with less stimulant dosage
- Potential off-label benefits in anxiety and rejection sensitivity dysphoria (RSD)
- Common side effects with alpha-2's: Dry mouth, constipation, sedation, low blood pressure, mood changes



Complex ADHD



Complex ADHD Overview

“Comorbidity” is the rule, not the exception

What is the primary issue at this time?

How does under-treated ADD/ADHD impact their other conditions?

Advantages to prioritizing ADHD Rx

Faster, more efficient treatment

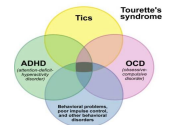
Safety issues associated with undertreated ADD/ADHD

Utilizing effective non-Rx treatments for co-occurring conditions

ADHD and Anxiety / Depression

- Anxiety vs rejection sensitivity?
- Large study in children found that stimulants REDUCED anxiety.
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4617411/>
- Timing of anxiety and depression symptoms with ADD/ADHD symptoms
- Role of sleep, appetite, hydration
- Combo therapy (ADHD meds + SSRI/SNRI). Drug interactions, while possible, are typical minor.
- Role of non-stimulants such as bupropion
- Integrating psychotherapy, coaching, supportive services

ADHD and OCD



- Up to 30% of patients with OCD also have ADHD
- Psychological tug of war between need for routine versus spontaneity
 - Hyperfocus vs obsession/compulsion
- Treat both conditions
- While psychostimulants may exacerbate OCD symptoms, don't assume that's always the case.
- Tics / Tourette - Consider alpha-2 agonists (Guanfacine / Clonidine) as either first line, or adjunctive treatment.

ADHD and Substance Abuse

- Very nuanced, limited, conflicting evidence base
 - o Underlying ADHD is a risk for substance abuse
 - o Studies in youth suggests stimulant use does not impact risk of substance in early adulthood
- Objective testing
- Dual diagnosis -> Treat both
- Mitigating the risk of stimulant abuse
 - o Education
 - o Surveillance
 - o Longer acting stimulants might be less risky

ADHD in older adults

Growing up I never thought of myself as different or special.

But I did notice everyone else seemed kind of slow, boring, dull, predictable, cautious, and small minded.

TotallyADHD.com

- Need for awareness for all parties involved (providers, patients, family, etc)
- Inattentive symptoms can mimic early onset dementia
- Symptoms may come to light after stressful life events
- Very limited evidence base for diagnostic tools, and treatment recommendations
- Potentially larger role for non-Rx interventions due to cardiac and other side effects with ADHD meds

Discussion (Q&A)



(makeameme.org)

Thank you!!



References

- Cabarkapa, S., King, J. A., Dowling, N., & Ng, C. H. (2019). Co-Morbid Obsessive-Compulsive Disorder and Attention Deficit Hyperactivity Disorder: Neurobiological Commonalities and Treatment Implications. *Frontiers in psychiatry*, 10, 557. <https://doi.org/10.3389/fpsy.2019.00557>
- Carlat, D., & Puzantian, T. (2022). *Medication Fact Book for Psychiatric Practice* (6th ed.).
- Dodson, W., M.D. (2020, February 28). How ADHD ignites rejection sensitive dysphoria: Meaning & medication solutions. *Additude Magazine*. <https://www.additudemag.com/rejection-sensitive-dysphoria-and-adhd/> (accessed 10/24/24)
- Elliott, J., Johnston, A., Huserau, D., Kelly, S. E., Eagles, C., Charach, A., Hsieh, S. C., Bai, Z., Hossain, A., Skidmore, B., Tsakonas, E., Chojcecki, D., Mamdani, M., & Wells, G. A. (2020). Pharmacologic treatment of attention deficit hyperactivity disorder in adults: A systematic review and network meta-analysis. *PloS one*, 15(10), e0240584. <https://doi.org/10.1371/journal.pone.0240584>
- Joshi, S. V., & Martin, A. (Eds.). (2022). *Thinking About Prescribing: The Psychology of Psychopharmacology with Diverse Youth and Families*.
- Katzman, M. A., Bilkey, T. S., Chokka, P. R., Fallu, A., & Klassen, L. J. (2017). Adult ADHD and comorbid disorders: Clinical implications of a dimensional approach. *BMC psychiatry*, 17(1), 302. <https://doi.org/10.1186/s12888-017-1463-3>

References (Continued)

- McCracken, J. T., McGough, J. J., Loo, S. K., Levitt, J., Del'Homme, M., Cowen, J., Sturm, A., Whelan, F., Hellemann, G., Sugar, C., & Bilder, R. M. (2016). Combined Stimulant and Guanfacine Administration in Attention-Deficit/Hyperactivity Disorder: A Controlled, Comparative Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(8), 657–666. e1. <https://doi.org/10.1016/j.jaac.2016.05.015>
- Meyers, J., Gajria, K., Candrilli, S. D., Fridman, M., & Sikirica, V. (2017). The impact of adjunctive guanfacine extended release on stimulant adherence in children/adolescents with attention-deficit/hyperactivity disorder. *Journal of comparative effectiveness research*, 6(2), 109–125. <https://doi.org/10.2217/icer-2016-0039>
- Molina, B. S. G., Kennedy, T. M., Howard, A. L., Swanson, J. M., Arnold, L. E., Mitchell, J. T., Stehli, A., Kennedy, E. H., Epstein, J. N., Hechtman, L. T., Hinshaw, S. P., & Vitiello, B. (2023). Association Between Stimulant Treatment and Substance Use Through Adolescence Into Early Adulthood. *JAMA psychiatry*, 80(9), 933–941. <https://doi.org/10.1001/jamapsychiatry.2023.2157>
- Price, M. Z., & Price, R. L. (2023). Extended-Release Viloxazine Compared with Atomoxetine for Attention Deficit Hyperactivity Disorder. *CNS drugs*, 37(7), 655–660. <https://doi.org/10.1007/s40263-023-01023-6>
- Sasaki, H., Jono, T., Fukuhara, R., Honda, K., Ishikawa, T., Boku, S., & Takebayashi, M. (2022). Late-manifestation of attention-deficit/hyperactivity disorder in older adults: An observational study. *BMC psychiatry*, 22(1), 354. <https://doi.org/10.1186/s12888-022-03978-0>
- Van de Glind, G., Brynne, C., Skuffe, A., Kaye, S., Konstenius, M., Levin, F., Mathys, F., Demetrovics, Z., Moggi, F., Ramos-Quiroga, J. A., Schellekens, A., Crunelle, C., Dom, G., van den Brink, W., & Franck, J. (2020). The International Collaboration on ADHD and Substance Abuse (ICASA): Mission, Results, and Future Activities. *European addiction research*, 26(4–5), 173–178. <https://doi.org/10.1159/000508870>
- 02W250518-PFK_Prescribing-Guidelines-for-ADHD_2020-9.pdf. Last updated 2021. Prescribing Guidelines for Attention Deficit/Hyperactivity Disorder (ADHD). <https://partnersforkids.org/wp-content/uploads/2021/>