



UW PACC

Psychiatry and Addictions Case Conference

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HOW DO I DIAGNOSE AND TREAT ADHD IN PEOPLE WITH METH USE DISORDER (MUD)?

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SPEAKER DISCLOSURES

- ✓ No conflicts of interest to disclose.

OBJECTIVES

- Understand epidemiology of ADHD in adults in general and in adults with MUD
- Identify common questions that arise when seeing a person with MUD + potential ADHD
- Review criteria for diagnosis and treatment of ADHD in adults and discuss special considerations in adults with MUD + ADHD

WHY TREAT ADHD IN PEOPLE WITH MUD?

- ADHD is prevalent in people with SUD
- ADHD outcomes: treating ADHD helps!
- SUD outcomes:
 - Some studies reporting decreased stimulant use
 - Some studies reporting better retention in SUD treatment
 - Treating ADHD does not worsen SUD
- But how do I diagnose and treat?

CASE: “DOC, I THINK I HAVE ADHD”

52 yo housed, employed M with methamphetamine use disorder returns to clinic for a routine follow up, stating “I think I have ADHD.” He describes difficulty with organizing tasks, sticking to tasks, being on time, prioritizing, and acting/thinking before talking, as well as difficulty sitting for a long time, when at work and caring for his grandkids.

Medical history: none

Psych history: PTSD

Substance history: MUD in remission for 1 year

Current meds: none

PE: unremarkable

MSE: unremarkable

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**What questions
would you have for
this patient?**

ADULT ADHD EPIDEMIOLOGY

- Among children diagnosed with ADHD (9.4%), 1/3 to 2/3 retain the diagnosis into adulthood
- Prevalence of **persistent adult ADHD** = 4.4%
- Comorbidities:
 - 25-50% have mood disorders
 - 50% have anxiety
 - 50% have personality disorders
 - 25-40% have SUD

ADHD PREVALENCE AND RESOLUTION IN PEOPLE USING METH

In meth users, ADHD is more prevalent and less likely to resolve in adulthood.

Among meth users, ADHD diagnosis predicts more severe impairment in employment, cognition, and daily functioning.

DSM-5 CRITERIA FOR ADHD IN ADULTS

Inattention

- a. Lack of attention to details/careless mistakes
- b. Difficulty sustaining attention in tasks
- c. Does not seem to listen when spoken to directly
- d. Does not follow through on instructions
- e. Difficulty organizing tasks and activities
- f. Avoids tasks that require sustained mental effort
- g. Loses or misplaces objects
- h. Easily distracted
- i. Forgetful in daily activities

Hyperactivity and impulsivity

- a. Fidgetiness (hands or feet)/squirms in seat
- b. Leaves seat frequently
- c. Feeling restless
- d. Unable to engage in leisure activities quietly
- e. Always “on the go,” difficulty being still for extended time
- f. Talks excessively
- g. Blurts out answers
- h. Difficulty waiting his or her turn
- i. Interrupts or intrudes on others

CONNECTING SYMPTOMS TO NEUROBIOLOGY

ADHD = developmental disorder related to dysfunction of dopaminergic circuits.

Poor selective attention =
dysfunction in dorsal
anterior cingulate cortex -
lower striatum - thalamus
loop

Poor sustained attention =
dysfunction in dorsolateral
prefrontal cortex - upper
striatum - thalamus loop

Hyperactivity =
dysfunction in prefrontal
motor cortex - lateral
striatum - thalamus loop

Impulsivity =
dysfunction of orbitofrontal
cortex - lower striatum -
thalamus loop

UNDER VS OVER-DIAGNOSIS OF ADHD IN ADULTS

Under diagnosis due to...

- Adult patient not able to recall childhood symptoms.
- Not recognizing ADHD symptoms can be less obvious in adults who compensate.
- Not recognizing atypical presentation.
- Stigma.

Over diagnosis due to...

- Not taking longitudinal history.
- Not considering other diagnosis/ADHD mimics.

ADHD MIMICS

Which of the following can present with symptoms similar to ADHD?

(multiple answers)

- A. Hypomania
- B. Antisocial personality disorder
- C. Obstructive sleep apnea
- D. Generalized anxiety disorder
- E. Depression

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COMMON ADHD MIMICS

- Mood disorders, depression, bipolar
- Anxiety disorders, GAD, PTSD
- Impulse control disorders
- Personality disorders
- Sleep disorders, obstructive sleep apnea
- Hearing problems
- Learning disorders

DIAGNOSING ADHD IN MUD

- Complete interview of **ADHD symptoms, course, and impairment.**
- **Whenever possible, get collateral** about lifetime symptoms/impairment history
- Thorough and complete assessment of:
 - **SUD**
 - **Medical/psychiatric history and exam**
- **Consider neuropsychological assessment** for cognitive performance and existing neurocognitive deficits.

WHAT ARE POTENTIAL COMPONENTS OF YOUR TREATMENT PLAN FOR ADULT PATIENT WITH ADHD + MUD?

A. Concerta

B. CBT

C. Weekly script

D. Treatment contract

E. Monthly follow up and urine drug screen

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**SHOULD I WAIT UNTIL MY PATIENT IS
ABSTINENT BEFORE I TREAT THEIR ADHD?**

**WHAT ELSE IS NEEDED?
OTHER CONSIDERATIONS?**

BUT CAN I GIVE STIMULANTS?

- **YES. 1st line = Stimulants (methylphenidate, lisdexamphetamine)**
 - Long acting (LA)/extended release (ER) whenever possible
 - Reason for LA/ER: reduces abuse liability, dopamine neurotransmission, and dosing frequency.
- **2nd line = Non-stimulants (atomoxetine, bupropion)**
 - Less effective than stimulants
 - BUT useful when high risk for stimulants, including first 3-6 months of recovery.
- **Also don't forget non-medication aspects of treatment (more on this in a bit)**

**WHAT ABOUT TRYING A STIMULANT
WHEN THEY HAVE SYMPTOMS BUT I'M
UNSURE OF ADHD DX?**

MORE QUESTIONS...

- Is it safe to prescribe stimulants to someone who might add more stimulants from the streets?
- **What about abuse liability with Rx stimulants?**
 - From higher to lower abuse liability:
 - immediate release (IR) methylphenidate or dexamphetamine
 - > LA/ER/osmotic release oral system (OROS) methylphenidate or lisdexamphetamine
 - > atomoxetine
- **Should I worry about diversion?**

DON'T FORGET THE NON-MEDICATION ASPECTS OF TREATMENT

- **Optimize SUD treatment!**
- **Psychoeducation**
- **Add objectivity**
- **Treatment contract**
- **Counsel for any psychiatric comorbidity**
- **CBT for ADHD**
- **Skills/coaching**
- **Coordinate with other providers**
- **Red flags:** patient developing psychotic symptoms, pill counts off, frequently losing prescriptions, asking for higher doses before adequate trial

TAKEAWAYS ON AMBULATORY MANAGEMENT OF ADHD + MUD

SUMMARY

- **Confirm ADHD diagnosis first.**
 - Thorough psych AND medical hx
 - Collateral, scales, neuropsych testing if possible
 - r/o mimics
- **Select ALL treatments indicated, not just meds.**
 - Meds
 - 1st line = LA/ER/OROS methylphenidate aka Concerta, or lisdexamphetamine. Adequate trial means titrating to highest possible dose
 - Alternatives: atomoxetine or bupropion
 - CBT
 - Psycho ed
 - Risk mitigation!

REFERENCES

- Biederman J, Monuteaux MC, Spencer T, et al. Stimulant therapy and risk for subsequent substance use disorders in male adults with ADHD: a naturalistic controlled 10-year follow-up study. *Am J Psychiatry*. 2008;165:597-603.
- Kollins SH. A qualitative review of issues arising in the use of psycho-stimulant medications in patients with ADHD and co-morbid substance use disorders. *Curr Med Res Opin*. 2008;24:1345-1357.
- Kooij JJS, Bijlenga D, Salerno L, Jaeschke R, Bitter I, Balázs J, Thome J, Dom G, Kasper S, Nunes Filipe C, Stes S, Mohr P, Leppämäki S, Casas M, Bobes J, Mccarthy JM, Richarte V, Kjems Philipsen A, Pehlivanidis A, Niemela A, Styr B, Semerci B, Bolea-Alamanac B, Edvinsson D, Baeyens D, Wynchank D, Sobanski E, Philipsen A, McNicholas F, Caci H, Mihailescu I, Manor I, Dobrescu I, Saito T, Krause J, Fayyad J, Ramos-Quiroga JA, Foeken K, Rad F, Adamou M, Ohlmeier M, Fitzgerald M, Gill M, Lensing M, Motavalli Mukaddes N, Brudkiewicz P, Gustafsson P, Tani P, Oswald P, Carpentier PJ, De Rossi P, Delorme R, Markovska Simoska S, Pallanti S, Young S, Bejerot S, Lehtonen T, Kustow J, Müller-Sedgwick U, Hirvikoski T, Pironti V, Ginsberg Y, Félegyházy Z, Garcia-Portilla MP, Asherson P. Updated European Consensus Statement on diagnosis and treatment of adult ADHD. *Eur Psychiatry*. 2019 Feb;56:14-34. doi: 10.1016/j.eurpsy.2018.11.001. Epub 2018 Nov 16.
- Kooij JJ, Huss M, Asherson P, Akehurst R, Beusterien K, French A, Sasané R, Hodgkins P. Distinguishing comorbidity and successful management of adult ADHD. *J Atten Disord*. 2012 Jul;16(5 Suppl):35-19S. doi: 10.1177/10870547111435361. Epub 2012 Apr 12.
- Levin FR, Evans SM, Vosburg SK, et al. Impact of attention-deficit hyperactivity disorder and other psychopathology on treatment retention among cocaine abusers in a therapeutic community. *Addict Behav*. 2004;29:1875-1882.
- Obermeit LC, Cattie JE, Bolden KA, et al. Attention-deficit/hyperactivity disorder among chronic methamphetamine users: frequency, persistence, and adverse effects on everyday functioning. *Addict Behav*. 2013;38(12):2874-2878. doi:10.1016/j.addbeh.2013.08.010.
- Pérez de los Cobos J, Siñol N, Pérez V, Trujols J. Pharmacological and clinical dilemmas of prescribing in co-morbid adult attention-deficit/hyperactivity disorder and addiction. *Br J Clin Pharmacol*. 2014;77(2):337-356. doi:10.1111/bcp.12045.
- Philips B, Franck J. Methylphenidate for attention deficit hyperactivity disorder and drug relapse in criminal offenders with substance dependence: a 24-week randomized placebo-controlled trial. *Addiction*. 2014 Mar;109(3):440-9. doi: 10.1111/add.12369. Epub 2013 Dec 1.
- Schubiner H, Saules KK, Arfken CL, et al. Double-blind placebo-controlled trial of methylphenidate in the treatment of adult ADHD patients with comorbid cocaine dependence. *Exp Clin Psychopharmacol*. 2002;10:286-294.
- Skoglund C, Brandt L, Almqvist C, D'Onofrio BM, Konstenius M, Franck J, Larsson H. Factors Associated With Adherence to Methylphenidate Treatment in Adult Patients With Attention-Deficit/Hyperactivity Disorder and Substance Use Disorders. *J Clin Psychopharmacol*. 2016 Jun;36(3):222-8. doi: 10.1097/JCP.0000000000000501.
- Song P, Zha M, Yang Q, Zhang Y, Li X, Rudan I. The prevalence of adult attention-deficit hyperactivity disorder: A global systematic review and meta-analysis. *J Glob Health*. 2021;11:04009. Published 2021 Feb 11. doi:10.7189/jogh.11.0400.
- van Emmerik-van Oortmerssen K, van de Glind G, van den Brink W, Smit F, Crunelle CL, Swets M, Schoevers RA. Prevalence of attention-deficit hyperactivity disorder in substance use disorder patients: a meta-analysis and meta-regression analysis. *Drug Alcohol Depend*. 2012 Apr 1;122(1-2):11-9. doi: 10.1016/j.drugalcdep.2011.12.007. Epub 2011 Dec 30.
- Wilens TE. The nature of the relationship between attention-deficit/hyperactivity disorder and substance use. *J Clin Psychiatry*. 2007;68:4-8.

THANK YOU!
QUESTIONS? COMMENTS?