Pay Attention!
Treatment of ADHD in adults

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R3 TALKS
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Objectives

- Review DSM V diagnostic criteria
- Review treatment options and evidence supporting pharmacotherapy and psychotherapy
- Discuss special considerations for patients with comorbid substance use
Current estimates 3-4% adults meet criteria for ADD
40-60% of children w/ ADD have sx persisting to adulthood
Evidence to suggest genetic component

Volkow - 2013
Case:

- 28 year old kindergarten teacher in clinic to discuss difficulty with attention. Can’t stay focused and is easily distracted, forgetful at work, can’t stay still when alone watching TV or reading. Recalls teachers thought she was messy and disorganized however, was able to do well in school. Recently demands at work have increased and she has had difficulty meeting deadlines and is thinking of quitting.
ADHD: Diagnosis

- Definition: a pattern of behavior present in multiple settings giving rise to difficulties in social, academic or work performance. The diagnosis requires evidence of inattention

- DSM V criteria- more inclusive of adults
DSM V criteria

- Inattention
  - Careless mistakes, poor attention to detail
  - Difficulty during lectures, reading lengthy writing, long talks
  - Does not seem to listen when spoken to directly
  - Fails to finish chores, starts tasks but quickly loses focus, easily sidetracked
  - Poor time management & organization, fails to meet deadlines
  - Often loses necessary objects
  - Often easily distracted by extraneous stimuli or unrelated thoughts
  - Forgetful, running errands, returning calls, paying bills, keeping appointments
DSM V criteria

- Hyperactivity/Impulsivity:
  - Fidgets or squirms in seat
  - Leaves seat when expected to remain seated
  - Often runs or climbs in situations when inappropriate: adults/teens may feel restless
  - Unable to engage in leisure activity quietly
  - “On the go”, “acting as if driven by a motor”
  - Talks excessively
  - Blurting out an answers, finishing others’ sentences
  - Difficulty waiting in line or for one’s turn
  - Interrupts or intrudes on others
Diagnosis can be complicated by co-occurring conditions

- GAD
- Substance Use
- Depression
- Bipolar disorder
- Thyroid disease
- Sleep disorder
Diagnostic Aids

• Multiple rating scales exist

• Six scales w/ subscales for informant reports:
  • Conners adult ADHD rating scale (CAARS)
  • Young adult questionnaire (YAQ)
  • ADHD rating scale (ADHD - RS)
  • Current symptoms scale (CSS)
  • Assessment of hyperactivity and attention (AHA)
  • Wender Utah Rating scale (WURS)

Taylor et al 2011
Case

28 year old kindergarten teacher in clinic to discuss difficulty with attention. Can’t stay focused and is *easily distracted, forgetful at work, can’t stay still* when alone watching TV or reading. Recalls *teachers* thought she was *messy and disorganized* however, was able to do well in school. Recently demands at work have increased and she has had *difficulty meeting deadlines* and is thinking of quitting.
Treatment options

- Pharmacotherapy
  - Stimulant
  - Non Stimulant
- Psychotherapy
- CAM/Alternatives
Pharmacotherapy

- **Stimulant**
  - Amphetamine based:
    - dextroamphetamine/aphetamine
  - Methylphenidate based:
    - methylphenidate
    - oral extended release methylphenidate

- **Contraindications/Cautions**
  - Glaucoma, use of MAO-I in past 2 weeks, agitation, tics
Non stimulant

- **Non Stimulant**
  - Atomoxetine
  - Guanfacine
  - Bupropion

- **Cautions**
  - Atomoxetine: Glaucoma, use of MAO-I in past 2 weeks, agitation, tics, liver toxicity
  - Bupropion: Seizure threshold
Psychotherapy

- Limited data comparing medication and therapy
  - Weiss 2012: RCT comparing pts randomized to CBT + medication or CBT + placebo. Both groups improved in ADHD sx
  - Philipsen 2015: 4 arm RCT comparing group psychotherapy +/- methylphenidate and regular individualized care +/- methylphenidate
Comparison of Psychotherapy w/Medication

Figure 2. Mean Attention-Deficit/Hyperactivity Disorder (ADHD) Index Scores by Randomized Intervention for the 419 Participants in the Full Analysis Set

- **A** Group psychotherapy and clinical management
- **B** Methylphenidate and placebo
- **C** Treatment combinations

Means (last mean carried forward) for the primary outcome measure, observer-rated Conners Adult ADHD Rating Scale ADHD Index, for group psychotherapy and clinical management (A), methylphenidate and placebo (B), and group psychotherapy with methylphenidate, group psychotherapy with placebo, clinical management with methylphenidate, and clinical management with placebo. Error bars indicate 95% CIs.

from Philipsen 2015
Guidelines: NICE 2008

- Drug treatment (methyphenidate) is first line treatment
- Atomoxetine can be first line if diversion a concern
- Adults with substance use disorders to be managed by specialist with expertise in ADHD and substance misuse
Case

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Special Considerations in Substance Abuse

Treatment of ADHD with a stimulant does not appear to affect the likelihood of subsequent SUD development

- Humphreys 2013 a meta-analysis of 15 longitudinal studies found no association between stimulant treatment history and subsequent substance use, abuse, or dependence

Humphreys 2013
Impact of ADHD Treatment on Cocaine Abuse

Impact of ADHD Treatment on Alcohol Abuse

- Barkley et al\textsuperscript{26} 0.39 (0.13-1.21)
- Biederman et al\textsuperscript{27} 0.13 (0.04-0.40)
- Burke, unpublished data 1.16 (0.57-2.36)
- Cretzmeyer et al\textsuperscript{29} 0.33 (0.10-1.12)
- Harty et al\textsuperscript{30} 1.14 (0.33-3.93)
- Hechtman et al\textsuperscript{31} 3.00 (1.06-8.50)
- Huss et al\textsuperscript{32,33} 0.61 (0.32-1.16)
- Mannuzza et al\textsuperscript{16} 2.00 (0.84-4.76)
- Owens et al, unpublished data 1.15 (0.10-13.08)
- Wilens et al\textsuperscript{36} 0.32 (0.11-0.96)
- Winters et al\textsuperscript{27} 1.97 (0.94-4.14)
- Combined 0.80 (0.46-1.38)

Benefits of treatment

- Kostenius 2014: RCT evaluating impact of initiation of ADD tx w/ MPH in prison and subsequent relapse to substance use on release
  - Treatment group with significantly fewer positive UDS
Methyphenidate Treatment and Substance Use

Kostenius 2014
Criminality

- Lichtenstein 2012 Swedish registry study evaluated ADHD treatment hx and criminal convictions
  - Rates of criminality lower during periods of treatment

- Concerns about diversion and use in cognitive enhancement
Objectives

- Review Updated DSM V diagnostic criteria
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References


