

WHEN TO REFER FOR PSYCHOLOGICAL TESTING FOR ADHD

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DISCLOSURES

- Dr. Flaherty has no relevant disclosures to report

AGENDA

- ADHD Screening & Treatment
- Clinical Interview
- Normed Measures
- Comorbid Conditions/Differential Diagnosis & Testing
- Case examples
- Conclusion

AUDIENCE



ADHD: A BEHAVIORAL DIAGNOSIS



ADHD SCREENING

- Initial ADHD screening by pediatrician
 - National Institute for Children's Health Quality Vanderbilt Assessment Scale
 - Completed by parents & teachers
 - Tally number of symptoms for each subtype
 - Also screens for anxiety, depression, oppositional defiant disorder & conduct disorder

FIRST LINE TREATMENT

- Ages 6+ stimulant medications
- Multiple doses & medications are often trialed to find what is optimal

CLINICAL HISTORY

- Onset
- Personal history of symptoms
- Where and when do symptoms occur?
- What is the functional impact of symptoms?
- Family history

MYTH BUSTING

- Neuropsychological testing is needed for ADHD
- (Neuro)psychological tests are NOT specific/sensitive to ADHD
- Executive function measures are helpful
- Neuropsychologists disagree on definitions, what these tests measure & the tests have limited real world application
- Neuropsychological evaluation simulates a classroom/high stakes testing
- Testing is 1-1 in a distraction free environment, NOT at all like a classroom/group testing
- Neuropsychological testing for individuals with ADHD is impaired
- Individuals could do poorly or well

REFERRAL QUESTIONS

- Is it ADHD or due to anxiety, depression or PTSD?
- Why isn't treatment working?
- Are we missing something?
- Stimulant/accommodation seeking?

NORM REFERENCED MEASURES

- Compare the child to age and sometimes gender matched peers
- Are the symptoms the child is experiencing more than the normative national sample?
- Include validity scales for over reporting and inconsistent responses

COMORBIDITIES & DIFFERENTIAL DIAGNOSIS

- Autism spectrum disorder
- Specific learning disorders
- Oppositional defiant disorder
- Intellectual developmental disorder
- Anxiety
- PTSD
- Depression
- Bipolar disorder
- Disruptive mood dysregulation disorder
- Sleep disorders

ANXIETY, PTSD & DEPRESSION



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- Clinical interview of onset of mood symptoms, inattention and hyperactivity
- Mood rating scales
 - Brief symptom count - SCARED-self & parent, GAD-7-self-report, CPSS-V-self-report
 - Norm referenced rating scales
 - Disorder specific self report- MASC, RCMAS-2, BYI-2 - BAI, BDI, also has scales for self esteem, anger & disruptive behavior, TSCC- self report, parent report for younger children
 - Broadband - BASC-3- parent, self, teacher

AUTISM

- Clinical interview with focus on infancy, toddler, & preschool behavior & how behavior and socializing changed as demands increased in middle school & high school
- Play/social based interview (e.g., ADOS-2, MIGDAS-2, BOSA)
- Parent/teacher/self-report norm referenced questionnaires (e.g., SRS-2, ASRS)
- Adaptive Behavior norm referenced questionnaires (e.g., Vineland-3 -caregiver/teacher report, ABAS)
- Intellectual abilities (WISC-V, WAIS-IV, RIAS-2, WASI-2, KBIT, Stanford-Binet-5, Leiter-3)
- Language abilities - informal & formal receptive & expressive (e.g., PPVT-5, CELF, EOWPVT-4, ROWPVT-4)

SPECIFIC LEARNING DISORDERS

- Reading
 - Dyslexia - reading, phonics & spelling difficulty
 - Reading comprehension
 - Written Expression
 - Spelling, sentence/essay writing
 - Dysgraphia also includes poor handwriting
 - Mathematics/Dyscalculia
 - Fluency, calculation, word problem solving
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- Not due to lack of exposure/teaching
 - Try intervention/remediation/tutoring
 - If academic achievement scores significantly below expectation following intervention and adequate access, then diagnose

TESTING WITH/WITHOUT STIMULANT MEDICATION

- Psychologists have personal preferences so ask
- If child has severe hyperactivity, may be better to test on medication to get through tasks
- If the question is how well medication is working, test on medication
- If want to really see a sample of behavior and how the child is naturally, don't take medication

ACCOMMODATIONS

- Qualified health professional who diagnosed/treated ADHD can write a letter to school recommending accommodations
- When making recommendations make them evidence based and tied to functional impairment
- Many colleges no longer require formal testing to receive accommodations

CASE EXAMPLE 1

- 6 year old, assigned male at birth, gender fluid
- Referred by mental health therapist for ADHD
- Premature birth at 33 weeks
- No diagnosed family mental health history
- Restless and impulsive during interview

CASE EXAMPLE 1

- Parent brought parent and teacher completed Vanderbilt questionnaires
 - Teacher- significant inattention, executive dysfunction, hyperactivity, impulsivity & disrupting/distracting peers. No mood symptoms. Academic skills = excellent.
 - Parent - significant hyperactivity, executive dysfunction, & impulsivity that significantly interfere with family life & peer interactions. Complains of stomach/gas pains, chews his lip, some sadness
- Meets behavioral DSM-5-TR criteria for ADHD
- Recommended 504 Plan, continue therapy, referred to psychiatric nurse practitioner for medication

CASE EXAMPLE 2

- 13 year old female referred by pediatrician
- Mom and patient were wondering about ADHD
- Family history - older brother with mild ADHD
- Clinical interview revealed patient was restless, shy & had social difficulties
- Mom and patient unsure if they wanted to pursue testing
- Normed questionnaires administered to patient, parent, & teachers

CASE EXAMPLE 2

Results

- Patient over-reported ADHD symptoms
- Parent & teachers didn't report significant ADHD symptoms
- Self & parent report indicated significant symptoms of Generalized Anxiety Disorder (GAD), with sadness & low self-esteem
- Patient attention difficulties & restlessness were symptoms of GAD

Recommendations

- Referred for brief individual therapy to learn coping skills for anxiety
- Parent not interested in medication at this time

CASE EXAMPLE 3

- 8 year old male referred by his mental health therapist for concerns of ADHD, autism & anxiety
- Family history of ADHD in mom
- Prescribed Concerta by psychiatric nurse practitioner
- Some social difficulties
- Some worries - mom's recent illness & friendships
- Anger/emotion regulation difficulties
- Sleep difficulties

Case 3 Intellectual Ability

Wechsler Intelligence Scale for Children- Fifth Edition (WISC-V)			
Standard Scores (Average = 100; Standard Deviation = 15)			
Subtest Scaled Scores (Average = 10; Standard Deviation = 3)			
Verbal Comprehension Index (VCI)	116	Visual Spatial Index (VSI)	114
Similarities	13	Block Design	12
Vocabulary	13	Visual Puzzles	13
		Fluid Reasoning Index (FRI)	121
		Matrix Reasoning	13
		Figure Weights	14
Working Memory Index (WMI)	107	Processing Speed Index (PSI)	108
Digit Span	12	Coding	10
Picture Span	10	Symbol Search	13
Nonverbal Index (NVI)	115		
General Ability Index (GAI)	120	Cognitive Proficiency Index (CPI)	109
Full Scale IQ Score (FSIQ)	118		

CASE 3 SUSTAINED ATTENTION

NEPSY-II Attention and Executive Function		
Scaled scores (average = 10; standard deviation =3)		
Score Name	Scaled Score	%ile
Auditory Attention Total Correct	7	16
Auditory Attention Combined	7	16
Response Set Total Correct	10	50
Response Set Combined	12	75

Case 3 Executive Functioning

Delis Kaplan Executive Function System		
Scaled Scores (Average = 10; Standard Deviation = 3)		
Primary Measures	Scaled Score	Subtests
Visual Scanning	12	Trail Making Test
Number Sequencing	13	
Letter Sequencing	12	
Number-Letter Switching	13	
Motor Speed	14	
Letter Fluency	9	Verbal Fluency Test
Category Fluency	9	
Category Switching Responses	6	
Category Switching Accuracy	7	
Total	10	Design Fluency Test
Filled Dots	12	
Empty Dots	10	
Switching	7	
Color Naming	11	Color Word Interference Test
Word Reading	10	
Inhibition	7	
Inhibition/Switching	12	

Wide Range Assessment of Memory and Learning (WRAML-3)

Standard scores (average = 100; standard deviation = 15)

Scaled scores (average = 10; standard deviation = 3)

Subtests	Standard/Scale Scores	%ile Rank
Screening Memory	110	75
Visual Immediate Memory	103	58
Immediate Picture Memory	11	
Immediate Design Learning	10	
Verbal Immediate Memory	115	84
Immediate Story Memory	12	
Immediate Verbal Memory	13	

CASE 3 IMMEDIATE MEMORY

CASE EXAMPLE 3 RESULTS & RECOMMENDATIONS

- Testing found social difficulties related to impulsivity & hyperactivity- doesn't stop to think about others' perspectives or observe social cues
- Sleep difficulties related to ADHD restlessness & worry
- Didn't meet criteria for autism or an anxiety disorder
- Recommendations: continue medication, continue therapy, monitor anxiety



The End

FINAL TIPS & TAKEAWAYS

1. ADHD alone can be diagnosed by pediatrician/PCP
2. When in doubt, consult/refer
3. Psychological testing helps with differential diagnosis/treatment planning



THANK YOU AND QUESTIONS



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