

# **Differential Diagnosis of Complex Adult-Patients with ADHD**

Dr. Taher Shaltout

Senior Consultant, Psychiatrist

Hamad Medical Corporation



# Adults with ADHD

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- ✿ What is ADHD?
- ✿ How do you diagnose it in adults ?
- ✿ How do you treat with medication?
- ✿ What other treatments help?
- ✿ What is the impact of comorbid conditions?
- ✿ How do you deal with treatment-refractory ADHD?

# What is ADHD?

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A syndrome in which symptoms of inattention, of hyperactivity/impulsivity, or both, significantly interfere with the capacity to work or to love, or both.

# Diagnosing ADHD

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## Criterion A:

At least 6 of 9 symptoms of inattention, or at least 6 of 9 symptoms of hyperactivity/impulsivity, or both, have persisted for at least 6 months. Symptoms are maladaptive, inconsistent with developmental level.

# Symptoms of Inattention

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- ✿ Fails to attend to details
- ✿ Fails to sustain attention on task
- ✿ Fails to listen
- ✿ Fails to finish jobs
- ✿ Poor at planning and organizing
- ✿ Loses things frequently
- ✿ Easily distracted by extraneous stimuli
- ✿ Often forgetful
- ✿ Avoids sustained mental effort

# Hyperactive/Impulsive Symptoms

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- \* Can't sit quietly
- \* Has to get up and move around
- \* Subjective restlessness
- \* Hard to engage in leisure quietly
- \* "On the go" or "driven"
- \* Talks excessively
- \* Speaks without thinking; blurts out
- \* Has difficulty waiting his or her turn
- \* Interrupts or intrudes on others



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Criterion B:  
Symptoms causing impairment were  
present *before age 7 years*

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Criterion C: Impairment from the  
symptoms is present in *two or more*  
*settings*  
(eg, work and home)



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Criterion D: There is clear evidence of  
*significant* impairment in social,  
academic or occupational functioning

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**Criterion E: The symptoms are not better accounted for by another mental disorder (eg, mood or anxiety disorder, substance abuse, personality disorder)**

# Initial Evaluation

## 1: Clinical Interviews

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- ✧ Past and present ADHD symptoms
- ✧ How, where symptoms cause impairments
- ✧ Alternative and comorbid disorders
- ✧ Developmental history/impulses
- ✧ Strengths\*
- ✧ Mental status examination

# Evaluation

## 2: Standardized Rating Scales

- ✱ Adult ADHD Self Report Scale
- ✱ Barkley System of Diagnostic Scales
- ✱ Brown Attention-Deficit Disorder Scales
- ✱ Conners Adult ADHD Rating Scale

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## Evaluation 3: Medical history and assessments



## Evaluation 4: Family

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- ✿ History of ADHD, results of treatment
- ✿ History of other disorders



## Evaluation 5: Information from a significant other or parent

- \* Documentation
- \* Interview data
- \* Rating scales



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## Evaluation 6: School and work assessments



# Evaluation 7: Other assessments

- ✱ Educational
- ✱ Psychological testing
- ✱ Neuropsychological testing
- ✱ Neuroimaging
- ✱ Vocational

# ADHD Subtypes

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- \* Combined
- \* Predominantly inattentive
- \* Predominantly hyperactive/impulsive
- \* *Not otherwise specified*

Prevalence of ADHD in  
adults: 4.4%



# Differential Diagnosis of ADHD

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- ✧ Psychiatric
- ✧ Medical
- ✧ Dietary
- ✧ Malingering
- ✧ Normal behavior



# Psychiatric Disorders Associated with ADHD

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- \* Anxiety disorders
- \* Affective disorders, uni- and bipolar\*
- \* Learning disorders
- \* Substance abuse disorders
- \* Tourette's Disorder
- \* Schizophrenia and other psychotic disorders
- \* Mental retardation
- \* Pervasive developmental disorders
- \* Personality disorders

# The Biology of ADHD

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- ✱ Attention is a complex state mediated by several areas of the brain
- ✱ Frontal lobe dysfunction is central but not the only site of the disorder

# The Biology of ADHD, cont'd

- \* Less gray and white matter
- \* Decrements in the dorsal prefrontal cortex
- \* Decrements in the cerebellum
- \* Decrements in the striatum

# Biology: Neurotransmitters

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- \* Dopamine relates to attention
- \* Norepinephrine relates to hyperactivity/impulsivity
- \* Current thinking: multiple neurotransmitter systems are involved

# Comprehensive Treatment for ADHD

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- ✧ Always starts with education
- ✧ Usually includes medication
- ✧ Usually includes psychotherapy
- ✧ Good alliance with significant others
- ✧ May need other resources (coaches, etc)

# Rx Goal : Enhance Resilience

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- ✿ Optimism
- ✿ Altruism
- ✿ Moral compass
- ✿ Faith and spirituality
- ✿ Humor
- ✿ Role model
- ✿ Social supports
- ✿ Face fears
- ✿ Life mission
- ✿ Training



# Medication for ADHD

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- ✱ CNS stimulants and other medications
- ✱ Result : moderate to marked improvement in 60-70% of adult ADHD patients
- ✱ *Rarely “magic,” by itself*

# CNS Stimulants for ADHD

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- \* Helpful, but less than in children
- \* Biggest problem in adults is *underdosing*
- \* Usual daily dosage range is 50-100 mg of methylphenidate, 30-50 mg of dextroamphetamine
- \* Try both, since 25% respond to one but not the other

# CNS Stimulants: Do *NOT* Use

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- ✱ Active cardiovascular heart disease or uncontrolled hypertension
- ✱ Active, untreated substance abuse
- ✱ Drug-abusing patients with less than three months of documented abstinence
- ✱ Current symptoms or past history of bipolar disorder, especially mania
- ✱ Psychosis

## Stimulants, Abuse, and ADHD Patients

- ✿ CNS stimulants are *rarely* abused by ADHD patients
- ✿ Used properly, they *decrease* the likelihood of later substance abuse in these patients
- ✿ If there is comorbid substance abuse, treat it first

# Non-CNS Stimulants for Adult ADHD

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- \* Atomoxetine (Strattera): Yes
- \* Bupropion (Wellbutrin): Yes
- \* Tricyclic antidepressants: Yes
- \* Monoamine Oxidase Inhibitors: Yes
- \* SSRIs, SNRIs: No
- \* Alpha-agonists: No (?)
- \* Nicotine and cholinergic agents: ?
- \* Modafinil (Provigil): Not alone, “layered”

# *Ineffective* Treatments for ADHD

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- ✱ Meds: lithium carbonate; amantadine; l-Dopa; D-,L-phenylalanine; tyrosine; antiyeast medications
- ✱ Dietary supplements: acetylcarnitine; ginkgo biloba; phosphatidylserine; essential fatty acids such as gamma-linolenic acid and docosahexanoic acid; megavitamins; DMAE (dimethylaminoethanol)
- ✱ Dietary manipulations



# Adult ADHD: Active Psychotherapy

- \* Support and psychoeducation
- \* Cognitive behavioral treatment
- \* Psychodynamic treatment
- \* Couples treatment
- \* Family treatment
- \* “Coaching”

# Comorbid ADHD: *Be Vigilant*

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- \* The *rule*, not the exception
- \* Look for ADHD in the anxious or depressed or substance-abusing patient; look for anxiety and depression and substance abuse in the ADHD patient
- \* *“Treat what’s worst, first”*
- \* Personality disorders worsen prognosis

# ADHD : Comorbid Affective Disorder

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- \* At least 25% of ADHD patients are depressed
- \* At least 25% of depressed patients have ADHD
- \* Strattera and the SSRIs: escitalopram (Lexapro) or sertraline (Zoloft) don't compete for the metabolic pathway

# ADHD and Bipolar Disorder

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- \* An estimated 5-10% of adult ADHD patients have bipolar disorder
- \* *Screen for it* by using a rating scale (eg, Mood Disorders Questionnaire) and data from significant others, family
- \* *Stabilize mood before treating ADHD*

# ADHD and Anxiety Disorders

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- \* An estimated 50% of ADHD patients have 1 or more anxiety disorders
- \* Stimulants “worsen” anxiety, but full treatment of ADHD lessens it

# Adult ADHD and Substance Abuse

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- ✱ 10% chance of current substance abuse,  
50% chance of past abuse,  
20-50% chance of future abuse
- ✱ Incidence higher in antisocial personality disorder



# ADHD and Substance Abuse, cont'd

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- \* Vigilance
- \* Information from patient and others
- \* Treat substance abuse first
- \* Document three or more months of abstinence before treating ADHD
- \* Treat the abstinent patient with Strattera and/or stimulants, but stay vigilant

# Treatment-Refractory ADHD

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- ✱ Lack of response to medication
- ✱ Many/severe comorbid disorders
- ✱ Unsupportive or hostile family
- ✱ Character pathology

# Treatment-Refractory ADHD

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- ✱ Combine stimulants with atomoxetine or bupropion
- ✱ Combine atomoxetine or bupropion with a stimulant
- ✱ Add modafinil
- ✱ Try TCA (alone or with stimulant)
- ✱ Alpha-agonist
- ✱ MAOI (alone)

# ADHD and Women

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- ✿ Girls have ADHD, *with significant morbidity and higher risk of drug abuse*
- ✿ Women with ADHD can founder when they have children
- ✿ Issues concerning pregnancy and breast-feeding require coordinated care

# ADHD and Families

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- ✧ Problems are multi-generational
- ✧ The spouse can be unsupportive or overburdened or both
- ✧ Think in terms of the family system

# ADHD in Adults: Summary

- Keep the diagnosis in mind
- Evaluate thoroughly
- Assess for comorbidity, especially affective disorder and substance abuse
- Identify strengths
- Treat what's worst, first
- Enhance resilience

