

Attention Deficit/ Hyperactivity Disorder

Assistant Professor Dr. LAURA NUSSBAUM

Objectives

- Define Diagnostic Criteria
- Discuss Workup and Differentiation
- Discuss Therapy

ADHD: What is It?

- **Triad:**
 - Inattentiveness, Hyperactivity, Impulsiveness
- Maladaptive
- **Academic and Behavioral Problems**
- **Onset Prior to Age 7**
- **Probable Organic Cause**
 - **Exact Etiology Unknown**

Prevalence

- **3-5 % of School Age Children (1:25)**
- **2 % of Adolescents (1:50)**
- **0.8 % of 20 year-olds (1:125)**
- **0.2 % of 30 year olds (1:500)**
- **0.05 % of 40 year olds (1:2000)**

Pitfalls in Diagnosis

- **DSM criteria also describe NORMAL kids!**
- **No Physical or Lab Markers**
- **Significant Overlap w/ Diff. Dx.**
- **Public Awareness, Misinformation**

Diff. Dx. and Comorbid Conditions

- **Oppositional Defiant Disorder**
- **Tic Disorders**
- **Learning Disabilities**
- **Mental Retardation**
- **Family Dysfunction/Discord**
- **Other Medical and Mental Disorders**

Keys to Accurate Diagnosis

- **History, History, and more History!!**
- **Standardized Checklists/Questionnaires**
- **Exclusion of Diff. Dx. by**
 - **Physical Exam**
 - **IQ testing, audiometry, eye screening**
 - **Multidisciplinary Approach**

History

- **Behavioral**
 - incl. classroom, home, other settings as well
 - interactions with peers
- **Medical: year by year school performance, developmental**

History

- **Family**
 - **ADHD, tics, psychiatric disorders**
- **Social**
 - **Family Dysfunction**
 - **Parenting Skills**

Useful Questions

- **Is the child more apt to:**
 - do things without thinking ahead, or plan to misbehave?
 - Refuse to do things or try to do things, but fails to finish?
- **Does the child display aggression toward people or animals, destructiveness or theft? (inconsistent with ADHD)**

Checklists/ Questionnaires

- **“Objective” Data (?)**
 - **Achenbach Behavior Checklist**
 - **ADD II (ACTeRs)**
 - **Connors Rating Scale**
 - **Child Behavior Rating Scale**
 - **ADHD Rating Scale**

Physical Exam

- **Directed**
 - **Hearing and Vision Screening**
 - **Developmental Milestones**
- **PE cannot rule-IN Diagnosis, only rules-OUT other Diff Dx.**

Multidisciplinary Approach

- **Primary Provider**
- **Psychoeducational Consultant**
 - academic, aptitude, and psychometric testing
 - IQ measurement
- **Social Services**
- **Counseling Services**
 - Individual and Family

Treatment/ Management

- **Education**
 - **Patient**
 - **Parent**
 - **Teachers and Caregivers**
 - **Physician**

Medical Therapy

- **Medications**

- **Stimulants:**

- methylphenidate (Ritalin, Concerta)
 - dextroamphetamine (Dexadrine)
 - Atomoxetine (Strattera)
 - pemoline (Cylert)

- **Others**

- TCA's, beta-blockers, bupropion, venlafaxine

Medication Doses:

- **Methylphenidate: 0.3-0.5 mg/kg per dose**
 - start low, titrate 5mg increments
 - max 60 mg
- **Dextroamphetamine**
- **Both meds are Psychostimulants**

Medication Doses

- **Pemoline**
 - **Start 37.5 mg/day (1 pill)**
 - **Increase by 18.75 mg at weekly intervals to response (1/2 pill)**
 - **Usual effective range: 56.25-75 mg/day**
 - **Maximum 112.5 mg/day (3 pills)**

Stimulants

- **Expected benefit**
 - Improved **CONCENTRATION**
 - **evidence: better grades**

Supportive Therapy

- **Counseling/ Psychotherapy**
 - **Behavior Modification**
- **Structured Schedule and Environment**
- **Regular Followups**

- **Social Services**
 - **on-base support programs, training**

Adult ADHD

- **LOTS of Media Attention Lately!**
- **Comorbidity with Major Depression**
 - 12% of Adult MDD patients *who had ADHD as children* manifest ADHD symptoms
 - May benefit from ADHD therapy

Adult ADHD

- **Therapy**
 - **Education**
 - **Support**
 - **Medication**
 - **Stimulants**
 - **TCA's incl desipramine**

Summary

- **ADHD diagnosis and therapy is complex**
- **There are NO short-cuts in gathering necessary history and data!**
- **Emphasis on**
 - **Diagnostic Accuracy by HISTORY**
 - **Realistic Expectations of Therapies**
 - **Multidisciplinary Approach**