

What is the difference between Autism Spectrum Disorder and ADHD

John W. Harrington MD
Division Director of General Academic Pediatrics
Children's Hospital of The King's Daughters
Professor of Pediatrics
Eastern Virginia Medical School
Chesapeake Bay Academy, Virginia Beach, VA
2-25-17 (10:45am-11:30am)

1 in 5 children
diagnosed with
autism had an ADHD
diagnosis first

Objectives

- Review the DSM 5 criteria for ADHD and the overlap with Autism
- Tools available to you for screening ADHD and Autism
- Co-morbid concerns
- Questions

Are you autistic?

<https://www.youtube.com/watch?v=3GYVMwIne94>

POLL the Audience

Does anyone think they have any symptoms of ADHD or Autism?

Do You have ADHD?

- <https://www.youtube.com/watch?v=EI-bIfC4rVM>

DSM 5 for ADHD (Inattentive)

- often fails to give close attention to details or makes careless mistakes in schoolwork, work, or during other activities
- often has difficulty sustaining attention in tasks or play activities
- is often forgetful in daily activities

ADHD Inattentive

- often does not seem to listen when spoken to directly
- often does not follow through on instructions and fails to finish school work, chores, or duties in the work place.
- often has difficulty organizing tasks and activities

ADHD Inattentive

- often avoids or is reluctant to engage in tasks that require sustained mental effort
- often loses things necessary for tasks or activities
- is often easily distracted by extraneous stimuli

ADHD (Impulsive and Hyper)

- often fidgets with or taps hands or squirms in seat.
- often leaves seat in situations when remaining seated is expected
- often runs about or climbs in situations where it is inappropriate

ADHD (Impulsive and Hyper)

- often unable to play or engage in leisure activities quietly
- is often "on the go" acting as if "driven by a motor"
- often talks excessively

ADHD (Impulsive and Hyper)

- often blurts out answers before questions have been completed
- often has difficulty awaiting turn
- often interrupts or intrudes on others (e.g. butts into conversations, games, or activities)

3 types of ADHD

- Inattentive only
- Impulsive/Hyperactivity only
- Combined

Screening Tests for ADHD

- ADHD Rating Scale IV
- Child Behavior Checklist
- Conner's
- *NICHQ Vanderbilt's Parent and Teacher

Screening

- NICHQ Vanderbilt's Parents and Teachers
 - Both scales are commonly used by health care professionals to evaluate ADHD symptoms
 - The teacher version assesses symptoms and performance impairment at school; the parent/caregiver version assesses perceptions of school performance and social functioning
 - Items (43 for the VADTRS and 45 for the VADPRS) are rated on 4- and 5-point scales
 - Higher scores indicate more severe symptoms

Guess which one

- <https://www.youtube.com/watch?v=-lO6zqIm88s>

Overlapping SXS

- Fidgeting or trouble settling down
- Impulsiveness
- Hyperfocus, or being extremely focused only on things of interest
- Social awkwardness

Screening Tests for Autism

- **M-CHAT or Modified Checklist for Autism in Toddlers**
- **Childhood Autism Spectrum Test (CAST)**

www.m-chat.org

Harrington JW, Bai R, Perkins A. Screening children for autism in urban clinic using an electronic M-CHAT. Clin Pediatr 2012; Nov 1

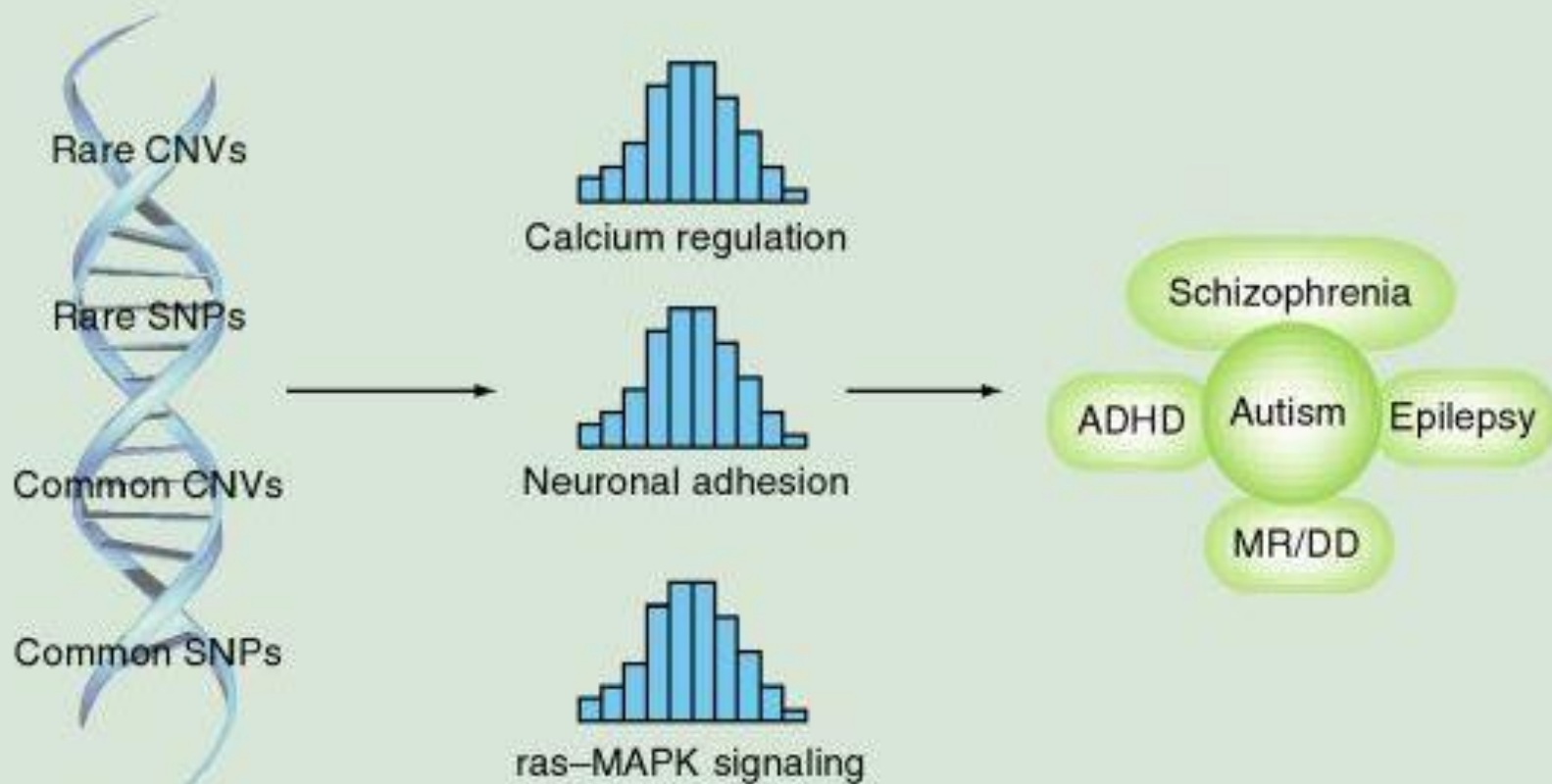
Scoring is very easy!

- No critical questions to memorize
- Only three questions with the answer as “no”
 - 2, 5, 12
- After scoring then algorithm is straightforward

Total Score after M-CHAT-R	Risk Level	Outcome or Actions required
< 3	Low	Continue ASD surveillance
3-7	Medium	Perform M-CHAT-R/F and if score 2 or > refer for diagnostic evaluation
8 or >	High	Immediate referral for diagnostic evaluation and early intervention

CAST

- <https://psychology-tools.com/cast/>
- 39 yes/no questions where 31 are scored
- Scores in the 15-31 range are considered positive and would require more testing



Expert Rev. Mol. Diagn. © Future Science Group (2009)

Source: Expert Rev Mol Diagn © 2009 Expert Reviews Ltd

Figure 1. Genetic variation may influence neurobiological endophenotypes (potential examples shown), which predispose to neurodevelopmental and neuropsychiatric disease.

Co-Morbid Disorders of Autism

- ID, Language delay, and Learning disability
- **ADHD**
- Anxiety and Phobias
- OCD
- Depression
- Bi-polar
- Disruptive Behaviors

Autism and ADHD together

- Generally the use of medication may be very different
 - Start low and go slow
 - Neuroleptic may work better than stimulant
 - Abilify, Risperdal, and Seroquel

3 important websites to know

- www.tidewaterasa.org
- www.autismva.org
- www.chadd.org

