IHS ASD Series: Differential Diagnosis and Comorbid Conditions in ASD

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Disclosure

• The presenters have no financial relationship to this program.
Objectives

At the end of this presentation, participants will be able to:

1. Recognize medical conditions that frequently occur in individuals with ASD
2. Identify common comorbid psychiatric conditions that occur in individuals with ASD
3. Analyze best practices for assessment of ASD and possible differential or comorbid diagnoses
4. Summarize treatment options for ASD with comorbid psychiatric diagnoses
Diagnostic and Statistical Manual, Fifth Edition (DSM-5) Diagnostic Criteria

- Deficits in social communication and social interaction (3)
  - Social approach/interaction
  - Nonverbal communication
  - Relationships

- Presence of restricted, repetitive patterns of behavior, interests, or activities (2)
  - Stereotyped or repetitive motor movements, objects, speech
  - Routines
  - Restricted interests
  - Sensory*
Additional DSM-5 Criteria

• Symptoms must be present in the early developmental period (might not manifest or be noted until later)

• Symptoms cause significant impairment in social, occupational, or other important areas of current functioning

• Disturbances are not better explained by intellectual disability or global developmental delay (note comorbid diagnosis)
Additional DSM-5 Changes

• Can now have comorbid diagnoses:
  • Language Disorders
  • Global Developmental Delay (under 5 years old)
  • Attention-Deficit/Hyperactivity Disorder (ADHD)
  • Anxiety and Mood Disorders
  • Medical Comorbidities
DSM-5 Differential Diagnoses

• In addition to knowledge about ASD diagnostic categories, a diagnostician must have experience with other DSM-5 disorders

• Must be able to distinguish ASD from:
  • Developmental Delay/Intellectual Disability
  • Depression
  • ADHD
  • Language Disorders
  • Selective Mutism
  • Schizophrenia
A diagnosis of ASD based on DSM-5 criteria requires deficits in which of the following areas:

A. Language and restricted, repetitive patterns of behavior, interests, or activities
B. Social communication and social interaction, and restricted, repetitive patterns of behavior, interests or activities
C. Delayed language and motor milestones
D. Social communication and attention
Comorbidity

- Intellectual Disability
- Genetic
  - Fragile X syndrome
  - Tuberous sclerosis
  - Tourette syndrome
- Mood Disorder
- ASD
- Anxiety
- Language Disorder
- ADHD
- Medical Conditions
  - Seizure disorders
  - Gastrointestinal disorders
  - Feeding and eating problems
  - Sleep disorders
Intellectual Disability

• Core features:
  • Deficits in intellectual functions
  • Deficits in adaptive functioning
  • Onset during the developmental period

• Associated features that may look similar to ASD:
  • May have difficulties with communication
  • May be socially unaware
  • May engage in repetitive, aggressive, or self-injurious behaviors
Intellectual Disability

• Differential diagnosis
  • Important to evaluate social communication abilities (relative to developmental age equivalent)

• Comorbidity with ASD:
  • Among individuals diagnosed with ASD, 32% have an intellectual disability, and 24% have borderline intellectual functioning
  • 40% of individuals with Intellectual Disability also meet criteria for ASD
  • Identified by measurable intellectual and adaptive deficits, as well as features of ASD
  • Tend to have more significant social communication impairment, and higher rates of RRBs
Language Disorder

• Core features:
  • Difficulties in the acquisition and use of language
  • Language abilities substantially below age expectations, impacting functioning
  • Onset during the developmental period and not accounted for by other diagnosis

• Associated features that may look similar to ASD:
  • May have difficulties with social interactions
  • May repeat language (echolalia)
Language Disorder

• Differential diagnosis:
  • Nonverbal communication (how and for what purposes)
  • Pretend play
  • Restricted interests and repetitive behaviors

• Comorbidity with ASD:
  • Can diagnose ASD and language disorder if language impairment is significantly impaired beyond that which would be expected for ASD
Review Question #2

When differentiating between ASD and a language disorder, it is important to consider:

A. How and why the individual uses other strategies to communicate
B. Whether the individual repeats things someone else said
C. Whether the individual has difficulties with social interactions
D. Whether the individual can talk
Medical Comorbidities

- Genetic Disorders
- Seizure Disorders
- Sleep Disorders
- Gastrointestinal Disorders
  - Feeding and Eating problems
Genetic Disorders

- Genetic causes of ASD
  - Can account for 20-25% of cases
  - DSM-5 also outlines the use of a specifier for genetic conditions

- Fragile X syndrome
  - Probably the most common single gene cause in ASD - 10% of children with ASD have Fragile X

- Angelman syndrome - 10%

- Rett syndrome - no longer classified under ASD due to identified cause by genetic mutations
  - ASD may still be considered
Seizure Disorders

• Individuals with ASD are 10-30% more likely to have seizures than the general population
• Increased in those with comorbid intellectual disability
• Predicts poorer long term outcomes
• Likely linked to genetic mutations and/or brain abnormalities
• Treatment protocols for seizure disorders
Sleep Disorders

• Significantly higher prevalence of sleep disturbance
  • 40-80% of children with ASD

• Variety of types of sleep disturbances

• Impact of sleep disturbance on functioning
  • Increased severity of ASD symptoms and maladaptive behaviors

• Interventions
  • Some evidence for melatonin: May help with sleep latency disturbances
  • Behavioral strategies: Sleep hygiene
  • Limited research (small studies, difficulty measuring outcomes)
Gastrointestinal Disorders

• Higher prevalence of GI problems in children with ASD
  • Abdominal pain, constipation, and diarrhea
  • Estimates range from 9 to 70%

• Possible relationship with feeding difficulties?
  • Children with ASD are 5 times more likely to have feeding problems

• Current limitations in research
  • Lack of empirical research for specific diets
Review Question #3

Individuals with ASD often experience certain medical conditions more frequently than typically developing people. These conditions include:

A. Seizures
B. Sleep disturbances
C. Gastrointestinal disorders
D. All of the above
Behavioral Health Diagnoses

- ADHD
- Depression
- Anxiety Disorders
- Other
  - Trauma
  - Bipolar
  - Schizophrenia
ADHD

• Core features:
  • Inattention (failure to attend to details, difficulty maintaining attention, difficulty organizing) and/or
  • Hyperactivity/Impulsivity (frequent fidgeting/movement, “on the go”, excessive talking or blurting, interrupting)
  • Symptoms present before age 12, occur in at least two settings, and are not better explained by another diagnosis

• Associated features that may look similar to ASD:
  • May have difficulties with social interactions
  • Inattention, hyperactivity and impulsivity are often present in individuals with ASD
ADHD

• Differential diagnosis:
  • Verbal and nonverbal communication abilities
  • Creativity and play
  • Restricted interests and repetitive behaviors

• Comorbidity with ASD:
  • Estimates range from 33-78%
Depression

• Core features:
  • Sad, empty, or irritable mood
  • Somatic and cognitive changes (e.g., diminished interest or pleasure in activities, weight changes, sleep changes, fatigue, difficulty concentrating or making decisions, feelings of worthlessness)

• Associated features that may look similar to ASD:
  • May have social avoidance
  • May have difficulty negotiating peer conflicts
  • May have few friends
Depression

• Differential diagnosis:
  • Timeline of symptoms
  • Verbal and nonverbal communication abilities
  • Restricted interests and repetitive behaviors

• Comorbidity with ASD:
  • Estimates range from 17-27%
  • Often occurs in higher functioning adolescents (average or higher intelligence)
  • Differences in suicidal ideation in children with depression and ASD
Anxiety

- **Core features**
  - Excessive feelings of worry, fear, and/or avoidance
  - Can be specific fears such as social situations or phobias or general feelings of anxiety
  - Can include obsessive compulsive disorders

- **Associated features**
  - May show anxiety in social situations that inhibit functioning
  - Ritualistic behaviors can become obsessive/compulsive
  - Avoidance of certain situations due to sensory concerns
Anxiety

• Differential Diagnosis
  • Developmental vs. situational
  • Social communication skills, particularly nonverbal skills are present in individuals with anxiety

• Comorbidity with ASD
  • About 70%
  • May occur in adolescence or adulthood
  • Treatment has an evidence base
Others

• Trauma- symptoms such as social withdrawal, repetitive behaviors/play or developmental delays/regression may mimic the symptoms of ASD
  • Accurate assessment of symptom onset, timing and presentation is essential

• Bipolar disorder, a mood disorder characterized by states of mania and depression
  • Possibly up to 27% comorbidity
  • Adults with childhood ASD - 7%

• Schizophrenia
  • Similar to the rate in the general population
  • In one study - 7.8%
Best Practice Diagnostic Assessment

• ASD diagnosis is complex and requires assessment of a variety of domains

• Best Practice is:
  • An interdisciplinary assessment with “specialists” in development and ASD
  • The use of ASD-specific measures
  • Comprehensive information gathering and evaluation of the individuals functioning
  • Formulation of conclusion together
  • Family-centered and culturally sensitive
Treating ASD and Co-Morbid Disorders

• Cognitive Behavioral Therapy (CBT)
  • Appropriate for individuals without cognitive disabilities, but social difficulties may impact traditional treatment
  • Incorporate Social Skills training component
  • Facing Your Fears program

• Strategies for ASD and Anxiety
  • Use visuals, use simple language (limit metaphors), include parents, include special interests (Moree and Davis, 2010)
Review Question #4

One of the most commonly used approaches for treating individuals with ASD and a co-morbid mood disorder is:

A. Psychoanalysis
B. Hypnosis
C. Cognitive Behavioral Therapy (CBT) with appropriate modifications
D. Gluten-free, casein-free diet
Treating ASD and Co-Morbid Disorders

• Pharmacological interventions
  • Multiple medication options for depression, anxiety, and ADHD
  • Limited medications available specifically approved for symptoms of ASD (risperidone and aripiprazole)

• Exercise
  • Can increase desired behaviors and decrease challenging behaviors in children with ASD
  • Improves symptoms of depression and anxiety

• Mindfulness therapy
  • Limited research
  • Pilot study indicated effectiveness for reducing symptoms of anxiety and depression in adults with ASD
Resources

• Autism Speaks: www.autismspeaks.org

• Autism Speaks Autism Treatment Network: https://www.autismspeaks.org/science/resources-programs/autism-treatment-network

• CBT for Children and Adolescents with High-Functioning Autism Spectrum Disorders edited by Angela Scarpa, Susan Williams White and Tony Attwood
References


References