ECHO Idaho: Behavioral Health in Primary Care

Autism Spectrum Disorders
April 3, 2019
Abhilash K. Desai MD
Psychiatrist
Disclosures


• I have no other financial relationships with commercial interests to disclose.
Learning Objectives

• Describe clinical manifestations of Autism Spectrum Disorders (ASD)

• Discuss role of multi-disciplinary team and technology in comprehensive assessment and management of ASD

• Describe psychosocial-environmental-nutritional-sensory-behavioral interventions and pharmacologic interventions to treat behavioral disturbances and primary mental health disorders in individuals with ASD
Spectrum of Autism

- ASD – Mild, Moderate, Severe. With and without Intellectual disability

- Replaces Pervasive Developmental Disorders

- Asperger’s disorder is ASD without Intellectual Disability (aka High functioning Autism)

- Social Communication Disorder

- Autism traits
Clinical Manifestations

• Symptoms typically visible between 12 and 24 months (e.g., delayed language patterns, unusual communication patterns, lack of social interest, atypical social interactions, odd patterns of play).

• Median age of diagnosis is after age 4 years.

• Four times more common in males compared to females.

• High variability in symptoms from one person to another.

• Many individuals show global improvement in adolescent.

Clinical Manifestations

- Social impairment is the hallmark symptom – social motivation/drive, social cognition, social communication
- Restricted and repetitive behaviors and interests
- Sensory sensitivities
- Behavioral disturbances (e.g., anxiety related to change, intense and prolonged outbursts/temper tantrums, self-injurious behaviors, aggression-irritability)

Neurobiology of ASD

• Deficient oxytocin function.

• Vasopressin dysfunction.

• Social reward system impaired.

• Impaired TOM (Theory of Mind neurocircuits), mirror neuron system, executive function, and weak central coherence.

Comprehensive Assessment

- Medical evaluation
- Functional behavior assessment (FBA)
- Psychiatric evaluation
- Use of technology (e.g., telemedicine)

Medical Assessment

- Allergies (e.g., food) and food sensitivities
- Gastrointestinal problems (e.g., constipation, diarrhea, GERD, pancreatic enzyme deficiencies)
- Seizures
- Pain (e.g., headache, migraine)
- Eczema
- Ear and respiratory infections
- TBI-related
- Macro and Micro-nutrient deficiencies due to restricted diets

- [http://nationalautismassociation.org/pdf/MedicalComorbiditiesinASD2013.pdf](http://nationalautismassociation.org/pdf/MedicalComorbiditiesinASD2013.pdf)
Psychiatric Assessment

- Medical causes
- Medication induced behavioral problems
- ADHD
- Sleep disorders
- ASD related persistent aggression and or self-injurious behaviors
- ASD with persistent anxiety
- Major Depression
- Psychotic disorders
- Bipolar disorder
- OCD
- Personality disorder (e.g., Schizotypal personality disorder)
- Trauma-related disorders

Psychiatric Medications

- ADHD medications (stimulants, atomoxetine, clonidine, guanfacine)
- Aripiprazole and risperidone approved by FDA for treatment of ASD related persistent aggression and or self-injurious behaviors
- Antidepressants for Major depression

Applied Behavior Analysis (ABA)

- Under the supervision of Board Certified Behavior Analysts
  
  - Behavior Analysis Certification Board. [https://www.bacb.com/bcba/](https://www.bacb.com/bcba/)
  - Association of Behavior Analysis International [https://www.abainternational.org/welcome.aspx](https://www.abainternational.org/welcome.aspx)
Other Interventions

• Education and training of family (parents) and professional caregivers/care partners
• Occupational therapy: Sensory integration strategies
• Speech and language pathologists: Communication strategies
• Dietician: Nutritional approaches
• Nidotherapy (modifying environment to match the strengths of the person with ASD)

High-Tech Approaches

• Screen-based media (e.g., tablets and smartphones) to capitalize on visual perception and visual search strengths
• Telemedicine and EMR
• Behavior Imaging (https://behaviorimaging.com)
• Technology-based augmentative communication devices and strategies
• Monitoring technology (e.g., GPS, medical alert)
• Access to healthcare provider notes and their input
• Virtual reality based approaches
• Other

– https://www.healthychildren.org/English/health-issues/conditions/Autism/Pages/default.aspx
Key Points

• Early diagnosis
• Multidisciplinary team
• BCBAs and Psychiatrists working together with Primary Care Providers to minimize psychiatric medication use and improve mental health outcomes
• Support from local community, state and federal government
References and Resources

- Upcoming Autism Mental Health conference on November 2, 2019 hosted by University of Idaho and partners.
- https://www.healthychildren.org/English/health-issues/conditions/Autism/Pages/default.aspx
- Autism Research Institute https://www.autism.com
- Autism Speaks https://www.autismspeaks.org 100 Day Kit: A tool kit to assist families in getting the critical information they need in the first 100 days after an autism diagnosis
- Autism Society of America http://www.autism-society.org
- American Psychiatric Association
- https://www.psychiatry.org/patients-families/autism