Autism Spectrum Disorder in Children and Adolescents

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OBJECTIVES

• Recognize Early Signs of ASD
• Review Methods of Assessments
• Discuss Treatment Options
Autism Spectrum Disorder

• Neurodevelopmental disability that can cause significant social, communication and behavioral challenges
Three Core Features of ASD

- Impairments in communication
- Impairments in social interaction
- Restrictive, repetitive Patterns
Early Signs

• No big smiles or other warm, joyful expressions by 6mos or thereafter
• No back-and-forth sharing of sounds, smiles or other facial expressions by nine months
• No babbling by 12 months
Early Signs

- No back-and-forth gestures such as pointing, showing, reaching or waving by 12 months
- No words by 16 months
- No meaningful, two-word phrases (not including imitating or repeating) by 24 months
- Any loss of speech, babbling or social skills at any age
Social Differences in Children with Autism

- Doesn't keep eye contact or makes very little eye contact
- Doesn't respond to a parent's smile or other facial expressions
- Doesn't look at objects or events a parent is looking at or pointing to
- Doesn't point to objects or events to get a parent to look at them
Social Differences in Children with Autism

• Doesn't bring objects of personal interest to show to a parent
• Doesn't often have appropriate facial expressions
• Unable to perceive what others might be thinking or feeling by looking at their facial expressions
• Doesn't show concern for others
• Unable to make friends or uninterested in making friends
Communication Differences in Children with Autism

- Doesn't point at things to indicate needs or share things with others
- Doesn't say single words by 16 months
- Repeats exactly what others say without understanding the meaning
- Doesn't respond to name being called but does respond to other sounds
- Refers to self as "you" and others as "I" and may mix up pronouns
Communication Differences in Children with Autism

- Often doesn't seem to want to communicate
- Doesn't start or can't continue a conversation
- Doesn't use toys or other objects to represent people or real life in pretend play
- May have a good memory, especially for numbers, letters, songs, TV jingles, or a specific topic
- May lose language or other social milestones
Behavioral Differences in Children with Autism

• Rocks, spins, sways, twirls fingers, walks on toes for a long time, or flaps hands
• Likes routines, order, and rituals; has difficulty with change
• Obsessed with a few or unusual activities, doing them repeatedly during the day
• Plays with parts of toys instead of the whole toy
Behavioral Differences in Children with Autism

- Doesn't seem to feel pain
- May be very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch
- Unusual use of vision or gaze—looks at objects from unusual angles
Pediatric Developmental Screening Flowchart

Parent completes screening tool in waiting room

Clinical staff scores, reviews screening tool answers

Screens Negative

Concerns

No Concerns

Provider discusses results and concerns with parents

No Concerns

Further Concerns

• Immediate action required
• Provider discusses results and concerns with parents
• Performs more specific medical & developmental assessment and/or refers for further assessment
• Provides anticipatory guidance

Screens Positive

• Provider discusses results with parents
• Provides anticipatory guidance
• No immediate action required
• Rescreen at next well-child visit

• Provides anticipatory guidance
• Monitors development
• Rescreen at next well-child visit

Referral to appropriate early intervention services if child is not yet 3 years old, or special education services if child is 3 years or older
Methods of Assessments

• SCREENING TOOLS
  • Ages and Stages Questionnaires (ASQ)
  • Modified Checklist for Autism in Toddlers (MCHAT)
  • Communication and Symbolic Behavior Scales (CSBS)
  • Parents’ Evaluation of Developmental Status (PEDS)
  • Screening tool for Autism in Toddlers and Young Children (STAT)
Methods of Assessments

• DIAGNOSTIC TOOLS
  • Autism Diagnosis Interview-Revised (ADI-R)
  • Autism Diagnostic Observation Schedule (ADOS)
  • Childhood Autism Rating Scale (CARS)
  • Gilliam Autism Rating Scale- Second Edition (GARS-2)
Treatment Options

• Early Intervention Services
  • helps children from birth to 3 years old (36 months) learn important skills. Services include therapy to help the child talk, walk, and interact with others
Types of Treatments

• Behavior and Communication Approaches
• Dietary Approaches
• Medication
• Complementary and Alternative Medicine
Behavior and Communication Approaches

• Applied Behavior Analysis
  • Types
    • Discrete Trial Training (DTT)
    • Early Intensive Behavioral Intervention (EIBI)
    • Pivotal Response Training (PRT)
    • Verbal Behavior Intervention (VBI)
Behavior and Communication Approaches

- Developmental, Individual Differences, Relationship Based Approach (DIR)
- Treatment and Education of Autistic and related Communication-Handicapped Children (TEACCH)
- Occupational therapy
- Sensory Integration Therapy
- Speech therapy
- The Picture Exchange Communication System (PECS)
Dietary Approaches

• Special Diets
  • Gluten Free Casein free Diet
  • Exclusion of Phenolic Compounds and foods High in Salicylates
  • Exclusion of Food Additives
  • Yeast Free Diet
  • Supplements
  • Fish Oils and other supplements rich in Omega 3 Fats
  • Probiotics and Enzymes
# Medications

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<td>Aggression/irritability</td>
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<td>Atypical**</td>
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<td>MT receptors</td>
<td>Melatonin</td>
<td>Sleep problems</td>
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Complementary and Alternative Treatment

• Types include:
  • Special diets
  • Chelation
  • Biologicals
  • Body based systems