

Autism Spectrum Disorder • DSM-5 Criteria • Persistent deficits in social communication and interaction • Restricted, repetitive patterns of behavior, interests or activities • Symptoms must be present in early development COVENANT CENTER FOR AL

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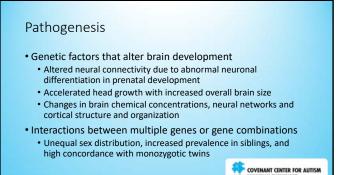


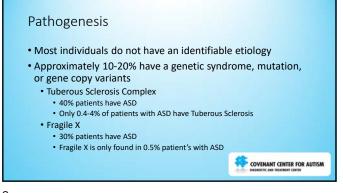
Prevalence National Health Interview Survey 2016 Approximately 1 in 40 Increased male to female ratio 1:26 for boys and 1:93 for girls3 to 4 times more common in b • Sibling risk of 3-10% • American College of Medical Genetics and Genomics • 7% risk if affected child is female • 4% risk if affected child is male • 30% risk if 2 or more siblings previously diagnosed COVENANT CENTER FOR AUTISM

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Early Signs and Symptoms

Lack of communication skills before two years of age

No babbling by 9 months

No pointing or gestures by 12 months

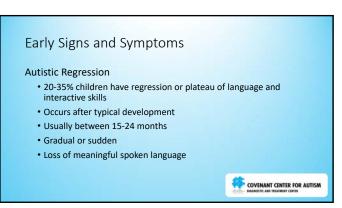
No orientation to name by 12 months

No single words by 16 months

No spontaneous meaningful two-word phrases by 24 months

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LISTEN TO PARENTS

Most parents (85%) had concerns about develop when their child was under 3 years of age but only 60% of children had initial evaluations before 4 years of age

Median age of diagnosis 46-67 months

Most common concerns are speech delays or frequent tantrums

Delay in evaluation and diagnosis due to the variability of signs and severity of symptoms

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# Team approach BCBA (Board Certified Behavior Analyst), Speech-Language Pathologist, Psychologist and Pediatric Physician Standardized Tests ADOS: Autism Diagnostic Observation Schedule ADI-R: Autism Diagnostic Interview Various speech and language evaluations Family Interview Developmental Milestones Medical, social and family history

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B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following:

1. Stereotyped or repetitive motor movements, use of objects or speech

2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior

3. Highly restricted, fixated interests that are abnormal in intensity or focus

4. Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment

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Criteria A-1: Social-Emotional Reciprocity

 Abnormal social approach
 "No personal space"
 Getting too close to a social partner and not recognizing when the partner is uncomfortable
 Indifference to socially motivated physical contact or affection

 Reduced sharing of interests, emotions or affect
 Limited interest in social interaction
 Limited attempts to draw the attention of others to objects by pointing or showing
 Lack of joint attention

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## Failure to initiate or respond to social interactions initial interest in social interactions with other children Content playing passively by themselves Failure of normal back-and-forth conversation Difficulty initiating or sustaining conversation One-sided conversations with limited reciprocal exchange Difficulty staying on topic, not taking turns, or becoming overly focused on personal interests Overly literal – difficulty understanding sarcasm, irony or jokes Abnormal prosody – volume, rhythm, intonation

# Criteria A-2: Nonverbal Communication Impaired ability to use and interpret nonverbal behavior Abnormalities in eye contact and body language Avoid eye contact or gaze too intently Turning away or not engaging Limited facial expressions Do not change facial expressions or expressions are overly exaggerated Deficits in understanding and use of gestures Awkward or absent gestures — pointing, waving, showing Only uses primitive gestures — leading or pulling a hand

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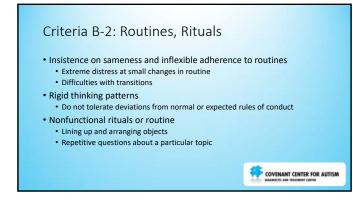
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Criteria B-4: Abnormal Sensory Response

• Apparent indifference to pain or temperature

• Hypersensitivity to certain types of sound or frequencies

• Adverse response to specific textures

• Restriction of certain food textures

• Increased sensitivity to certain kinds of touch – light touch, clothing

• Excessive smelling or touching of objects

• Compulsive touching of certain textures

• Sniffing or licking nonfood objects

• Visual fascination with lights or movement

• Peering

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Treatment

• Goal is to maximize functioning and improve quality of life

• Improve social functioning and play skills

• Improve communication

• Improve adaptive skills

• Decrease nonfunctional or negative behaviors

• Individualized to child's age and specific needs

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# Treatment • Social Skills • Improve overall social competence and friendship quality • Learn to initiate social interactions and maintain joint attention • Taught through modeling, peer training, or story-based

Parental Involvement
 Training parents in specific behavior management
 Improvement in disruptive and noncompliant behaviors
 Help families interact with their child
 Increase parental satisfaction, empowerment, and mental health

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### • Medical management • Psychotropic medications have not been proven to correct the core deficits of ASD • Directed to specific symptoms or coexisting conditions • ADHD, ODD, Anxiety, Depression • Initiated after educational and behavioral interventions • Risperidone and Ariprazole • Only two medications specifically approved for treatment of ASD • Effective for irritability, tantrums, aggression, self-injurious behavior

• Complementary and Alternative Medicine (CAM)

• "Group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine"

• Most are inadequately evaluated and cannot be recommended

• Potential risks

• Medication interactions, Toxic effects of biological agents

• Delay in starting validated therapy, Financial cost

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# • Complementary and Alternative Medicine (CAM) • Gluten-free, casein-free diet – possible nutritional deficiencies • Hyperbaric oxygen – very costly • Music Therapy – inconsistent data • Animal Therapy – only observational studies • Auditory Integration training – efficacy unproven and expensive • Omega-3 – randomized trials have not shown benefits • Probiotics – not adequately tested • Cannabinoids (CBD) – limited research

Providing routine health maintenance and preventative care

Monitor dietary intake and nutritional deficiencies

Treating GI symptoms - constipation or diarrhea

Behavioral and/or related to dietary intake

Discussion of sleep problems in 40-80%

Difficulty falling asleep, staying asleep or early awakening

Monitor for seizures, 20-35% have epilepsy

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# Role of Primary Care Provider • Safety guidance • Frequent wandering • Approximately 50% of children will try to elope at least once • Family support and guidance • Enrolling in therapies • Special education laws – IEP, 504 plan • Discussion about complementary and alternative therapies



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