

Autism Spectrum Disorder

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Learning Objectives

- What is Autism Spectrum Disorder
- Neurological Basis of Autism
- Importance of Early Detection

Which One Do You think?

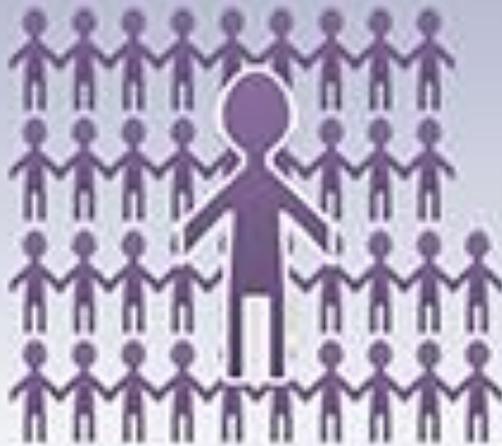
- * Out of 1000 children, how many would you expect to have Autism Spectrum Disorder?
 - * A) 9
 - * B) 21
 - * C) 15

What is Autism Spectrum Disorder?

A neurodevelopmental disorder defined by persistent deficits in social communication and social interaction, accompanied by restricted, repetitive patterns of behavior, interest or activities



Prevalence of Autism



Prevalence of Autism

Korea 1 in 38

1 in 68	2014
1 in 88	2012
1 in 110	2009
1 in 150	2007
1 in 500	1995
1 in 2,500	1970

Reasons



- * Diagnostic criteria have broadened to include a spectrum of symptoms
- * Availability of better screenings and diagnostic tools
- * Public Awareness
- * What the schools are counting
- * Individuals being diagnosed
- * Symptoms vary from across setting and activities

How is ASD Diagnosed?

Screening

Comprehensive diagnostic evaluation

What Is Happening In The Brain?



- * Limbic System
- * Cerebellum
- * Corpus Callosum
- * Brain Stem
- * Basal Ganglia

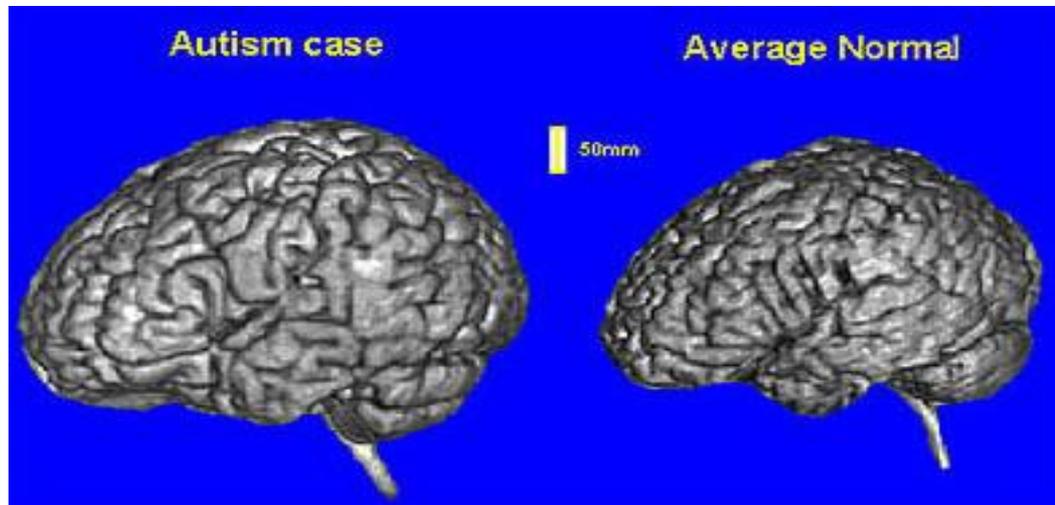
What Is Happening In The Brain?

- * Emotion
- * Attention
- * Communication and Language
- * Cognition
- * Sensory Response



Early Brain Overgrowth in ASD

- * Abnormal Brain overgrowth appears to be due to enlargement of gray and white matter in cerebral, cerebellar and limbic structures of the brain.



Genetics vs Environment



Genetics vs Environment



Importance of Early Detection

- * All toddlers with social communication delays are at risk for ASD.
- * Not to rule out ASD prematurely because the features unfold in infants and toddlers.
- * Diagnosis of ASD is not necessary to begin intervention, it is important to recognize red flags

Empowering Families



Web Resources



Summary

- * Autism Spectrum Disorder is a neurodevelopment disorder and is the fastest growing disorder in America. (CDC, 2014)
- * recognizing the role of early detection as a key component to enhancing a child's potential which means earlier access to intervention to all those diagnosed to lead productive, inclusive, and fulfilling lives.