



# **AUTISTIC SPECTRUM DISORDER**



# AUTISTIC SPECTRUM DISORDER “

PERVASIVE DEVELOPMENTAL DISORDER “

- ? refers to a group of disorders characterized by abnormalities in communication and social interaction and by restricted repetitive activities and interests.**
- ? These differed by the level of severity, specific symptoms, and in some cases underlying pathology**
- ? Usually development is abnormal from infancy, and most cases are manifested before the age of 3 years**

## **AUTISM SPECTRUM DISORDER :**

- ? Autism**
- ? Asperger's disorder**
- ? Childhood disintegrative disorder**
- ? Rett's syndrome**
- ? Pervasive developmental disorder – not otherwise specified**

# EPIDEMIOLOGY

- The **4:1** ratio of diagnosis in **males**: females.
- Symptoms typically recognized between **12** and **24 months** old, but varies based on severity.



# ETIOLOGY

- Etiology of ASD is multifactorial:
  - Prenatal neurological insults (e.g., infections, drugs), advanced paternal age, and low birth weight.
  - Fifteen percent of ASD cases are associated with a known genetic mutation.
  - Fragile X syndrome = most common known single gene cause of ASD.
  - Other genetic causes of ASD: Down syndrome, Rett syndrome, tuberous sclerosis.
- ■ High comorbidity with ID.
- ■ Association with epilepsy



What is the  
DSM-5?

DSM-5 collapses the core diagnostic impairments into two domains(A and B):

**A . Problems with social interaction and communication:**

- 1)Impaired social/emotional reciprocity (e.g., inability to hold conversations).
- 2)Deficits in nonverbal communication skills (e.g., decreased eye contact).
- 3)Interpersonal/relational challenges (e.g., lack of interest in peers).

**B. Restricted, repetitive patterns of behavior, interests, and activities:**

- 4)Intense, peculiar interests (e.g., preoccupation with unusual objects).
- 5)Inflexible adherence to rituals (e.g., rigid thought patterns).
- 6)Stereotyped, repetitive motor mannerisms (e.g., hand flapping).
- 7)Hyperreactivity/hyporeactivity to sensory input (e.g., hypersensitive to particular textures).



**C.** Abnormalities in functioning begin in the early developmental period

**D.** Not better accounted for by ID or global developmental delay. When ID and ASD co-occur, social communication is below expectation based on developmental level

**E.** Causes significant social or occupational impairment



# ASSOCIATED BEHAVIORAL SYMPTOMS THAT MAY OCCUR IN AUTISM SPECTRUM DISORDER

- Disturbances in Language Development and Usage : no longer considered a core feature of autism spectrum disorder , Language deviance, as much as language delay , difficulty putting meaningful sentences together, even when they have extensive vocabularies.
- intellectual Disability.
- Irritability.
- Instability of Mood and Affect.
- Response to Sensory Stimuli.
- Hyperactivity and Inattention.
- Precocious Skills.
- Insomnia.
- Minor Infections and Gastrointestinal Symptoms.

# ASPERGER SYNDROME ( AS )

- ? **Also known** : schizoid disorder of childhood , autistic psychopathy , level 1 autism spectrum disorder .
- ? **Usual onset** : before two years old with long term duration
- ? **Causes** : poorly understood .
- ? considered **high functioning** form of autism .
- ? Has high heritability , genetics has not determined conclusively , environmental factors play a role .
- ? It is neurodevelopmental disorder characterized by significant difficulties in social interaction and non-verbal communication , along with restricted and repetitive patterns of behavior and interest .
- ? **Differs from** other forms of ASD by relatively unimpaired language and intelligence .

# RETT SYNDROME

? Rare , **non – inherited** , genatic , postnatal neurological disorder that occurs mainly in **girls** ( in contrast with autism which primarily happens in males ) .

? Slow onset of symptoms , starts around 1-2 years of age ( similar to autism ) .

? Hallmark : **regression of cognitive or motor skills** .

? Genetics : x-linked dominant ( only in female –fatal in male ) , mutation in MECP2 gene ( significant expression in brain ) .

? **Clinical manifestations :**

- \* deceleration of head growth
- \* gait and motor abnormalities
- \* stereotypic hand movement ( hand to mouth licking , grabbing )
- \* loss of purposeful hand skills
- \* loss of spoken language

# CHILDHOOD DISINTEGRATIVE DISORDER ( CDD)

- Also known as **HELLERS SYNDROME** and **DISINTEGRATIVE PSYCHOSIS** .
- **Rare** condition characterized by late onset of developmental delays or severe and sudden reversals in language , social function and motor skills .
- Usual onset 3 – 4 years of age .
- Causes of CDD is **unknown** CDD has some similarity to autism and considered low functioning form of it
- S and S : between the ages of **two** and **ten skills acquired** are **lost** almost completely in at **least two** of the following **six functional** areas : \* expressive language skills \* social skills and self care skills \* control over bowel and bladder \* motor skills \* plays skills
- lack of normal function also occurs in two of the following areas : \* social interaction \* communication \* repetitive behavior and interest patterns
- Treatment involves both behavior , environmental therapy and medication .

# PDD –NOS

. The term atypical autism denotes a residual category for pervasive developmental disorders that resemble ASD but do not meet the diagnostic criteria for any of the syndromes within this group

# PROGNOSIS

- ❓ ASD is a **chronic** condition . The prognosis is variable,  
but the two most important predictors of adult outcome  
are level of **intellectual functioning** and **language impairment**.
- ❓ Only a minority of patients can live and work independently in adulthood.

# TREATMENT

There is **no cure** for autism, but various treatments are used to help manage symptoms and improve basic social, communicative, and cognitive skills:

- 1) Early and Intensive Behavioral Intervention (EIBI)
- 2) Social Skills Training.
- 3) Behavioral therapy.
- 4) Cognitive-Behavioral Therapy
- 5) Low-dose atypical antipsychotic medications (e.g., risperidone, aripiprazole) may help reduce disruptive behavior, aggression, and irritability.

