***AUTISM طيف التوحد***

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It is estimated that 12-16% of children have a developmental or behavioral disorder.

**Characterized**: \* impaired social interactions and \* communication \* restricted interests ,activities, and behaviors. This disorder are called autism spectrum disorder.

**AUTISM can be classified to**

1. Autistic disorder.
2. Asperger’s syndrome.
3. Rett’s disorder.
4. Childhood disintegrative disorder.
5. Pervasive developmental disorder not otherwise specified.

About 5.7 children in 1000 have autistic spectrum disorder, half of the cases have simply autism. The disorder is about four times more common in males than females**. Peak age at diagnosis is 6-11 years but symptoms often begin at 18-24 months of age.**

**How is Autism Diagnosed?**

1. No definitive medical test
2. Team uses interviews, observation, and specific checklists developed for this purpose.
3. Team might include neurologist, psychologist, developmental pediatrician, speech/language therapist, learning consultant, etc.
4. Must rule out MR, hearing impairment, behavior disorders, or eccentric habits

**Etiology and pathophysiology**

* Cause of autism is unknown.
* Genetic transmission as twins.
* Multiple gene with environmental impact are most likely.
* Congenital rubella syndrome, fragile x syndrome, phenylketonuria, down syndrome, TB are all associated with a higher than normal incidence.
* Researchers imply relationship between the measles-mumps-rubella vaccine and disorder.

**Clinical manifestations**

1. Social interactions.
2. Communication.
3. Adapting to new situations.
4. Attention span and organizing responses to situations.
5. May fail to initiate conversations, and may have impaired observations of nonverbal behavior.
6. Autistic children are unable to respond to social and emotional cues.
7. Head banging, twirling in circles, biting themselves and flapping their hands or arms.
8. Responses to sensory stimuli are abnormal include an extreme aversion to touch, loud noises, and bright lights. Emotional lability is common
9. \*Communication difficulties or delays in speech and language are common and are often the first symptoms that lead to diagnosis.  
   \*Abnormal verbal and nonverbal communication.  
   \*Agitation and withdrawal when routines are changed.  
   Play with same objective over and over.
10. Eating only certain types or color of foods or eating in specific patterns.

**1. Autistic Disorder**

Impairments in **social interaction, communication**, and **imaginative play**.

Apparent before age 3.

Clinical therapy:

Improving behaviors and communication skills, providing physical and occupational therapy, structuring play interactions with other children, education parents about child’s needs.

**2. Asperger’s Disorder**

* Impairments in social interactions, and presence of restricted interests and activities
* No clinically significant general delay in language
* Average to above average intelligence.

**Clinical therapy: Social interaction are the focus of therapy.**

**3. Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS)**

Often referred to as **atypical autism**

Used when a child does not meet the criteria for a specific diagnosis, but there is severe and pervasive impairment in specified behaviors

**Clinical therapy:** Behavioral therapy focuses on building social skills.

**4. Rett’s Disorder**

Period of normal development and then the loss of previously acquired skills.

Ataxia, handwringing, dementia, and growth retardation is increased.

Affecting methyl-CpG-binding protein2 which is important in brain development.

**Clinical therapy:** Early intervention in areas of abnormal behaviors.

5. **Childhood Disintegrative Disorder**

Normal development for at least the first 2-5 years

Then significant loss of previously acquired skills. Behaviors finally stabilize at some point without further deterioration.

**Clinical therapy:**

Focus on areas of developmental function that show abnormality. school deal with communication, play, physical therapy, and teaching management skills to parents.

**Elements of Facilitated Communication**

1. Physical Support

2. Initial training/introduction

3. Maintaining focus

4. Avoiding competence testing

5. Generalization

6. Fading

**Echolalia**

* Common in very young children (Age 3)
* Immediate or delayed (even years)
* Is there communicative intent with echolalia?

**Social Interaction**

One of hallmarks of autism is lack of social interaction

1. Impaired use of nonverbal behavior

2. Lack of peer relationships

3. Failure to spontaneously share enjoyment, interests, etc. with others

4. Lack of reciprocity

**Behaviors**

* **Repetitive behaviors**, including *obsessions, tics, and perseveration*
* **Impeding behaviors** (impede their learning or the learning of others)

Will need positive behavior supports

**A. Self-injurious behavior**

**B. Aggression**

**Sensory and movement disorders**

1. Very common
2. Over- or under-sensitive to sensory stimuli
3. Abnormal posture and movements of the face, head, trunk, and limbs
4. Abnormal eye movements
5. Repeated gestures and mannerisms
6. Movement disorders can be detected very early – perhaps at birth

P**redictability**

* Change in routine is very stressful
* May insist on particular furniture arrangement, food at meals, TV shows
* Symmetry is often important
* Interventions need to focus on preparing students for change if possible

**Intellectual functioning**

* Autism occurs in children of all levels of intelligence, from those who are gifted to those who have mental retardation
* In general, majority of individuals with autism are also identified as having mental retardation – 75% below 70
* Verbal and reasoning skills are difficult
* Savant syndrome

**Interventions**

1. Individualization and early intervention are the keys

2. Include life skills, functional academics, and vocational preparation

3. Positive behavior support

4. Social stories (music therapy?)

5. Lovaas model