

Lesson 22

Autism Spectrum Disorders (ASD)

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Introduction

Introduction

- Suffering of those with ASD and those who care for them
- Chronic and heterogeneous conditions
- Onset before 3 years of age
 - Condition present at birth or even in foetal period
 - Some children show signs during the first few months of life
 - Other cases do not become manifest until 24 months of age
 - Sometimes development seems to be normal until 18–24 months
 - From then on, patients stop acquiring new skills and lose those they have already acquired
- **It is important to make an early detection and provide early care**

Introduction

- People who suffer from ASD interact, communicate, learn and behave differently from people who do not.
 - Sometimes there appears to be no difference.
 - Some patients have a 'high level' of functioning in specific areas.
 - Other patients require constant need for support in all areas of functioning throughout their lives.
- Some people who do not have ASD may present some of the symptoms of the disorder.

Description

Description

ICD-11 for Mortality and Morbidity Statistics (December 2018)

Search autism

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▼ 06 Mental, behavioural or neurodevelopmental disorders



▼ Neurodevelopmental disorders

▶ 6A00 Disorders of intellectual development

▶ 6A01 Developmental speech or language disorders

▼ 6A02 Autism spectrum disorder

6A02.0 Autism spectrum disorder without disorder of intellectual development and with mild or no impairment of functional language

6A02.1 Autism spectrum disorder with disorder of intellectual development and with mild or no impairment of functional language

6A02.2 Autism spectrum disorder without disorder of intellectual development and with impaired functional language

6A02.3 Autism spectrum disorder with disorder of intellectual development and with impaired functional language

6A02.4 Autism spectrum disorder without disorder of intellectual development and with absence of functional language

6A02.5 Autism spectrum disorder with disorder of intellectual development and with absence of functional language

6A02.Y Other specified autism spectrum disorder

6A02.Z Autism spectrum disorder, unspecified

▶ 6A03 Developmental learning disorder

Foundation Id : <http://id.who.int/icd/entity/437815624>

6A02 Autism spectrum disorder

All ancestors up to top

- 06 Mental, behavioural or neurodevelopmental disorders
- Neurodevelopmental disorders
- 6A02 Autism spectrum disorder

[Hide ancestors](#)

Description

Autism spectrum disorder is characterized by persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and by a range of restricted, repetitive, and inflexible patterns of behaviour and interests. The onset of the disorder occurs during the developmental period, typically in early childhood, but symptoms may not become fully manifest until later, when social demands exceed limited capacities. Deficits are sufficiently severe to cause impairment in personal, family, social, educational, occupational or other important areas of functioning and are usually a pervasive feature of the individual's functioning observable in all settings, although they may vary according to social, educational, or other context. Individuals along the spectrum exhibit a full range of intellectual functioning and language abilities.

Inclusions

- Autistic disorder
- Pervasive developmental delay

Exclusions

- Developmental language disorder (6A01.2)
- Schizophrenia or other primary psychotic disorders (6A20-6A2Z)

[Release Notes](#)

Description

- Features
 - Persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and
 - A range of restricted, repetitive, and inflexible patterns of behaviour and interests.
- The onset of the disorder occurs during the developmental period, typically in early childhood.
 - However, symptoms may not become fully manifest until later, when social demands exceed limited capacities.

Description

- Deficits are sufficiently severe to cause impairment in personal, family, social, educational, occupational and other important areas of functioning. They are usually a pervasive feature of the individual's functioning and are observable in all settings. However, they may vary according to social, educational or other contexts.
- Individuals along the spectrum exhibit a wide range of intellectual functioning and language abilities.

Description

- A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive).
- B. Restricted, repetitive patterns of behaviour, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive).



Description

- C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.



Description

- E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.



Epidemiology

Epidemiology

- European study (2018)
 - $n = 600,000$ children between 7 and 9 years old
 - Prevalence: 11.2 per 1,000 inhabitants (1 in 89, or 1.12%)
 - Estimated global prevalence: 4.4–19.7 per 1,000
- North American study (2014)
 - $n > 300,000$ children aged 8 years
 - Prevalence: 16.8 per 1,000 inhabitants (1 in 59, or 1.7%)
 - Estimated global prevalence: 13.1–29.3 per 1,000
 - Significant increase compared to previous periods.
 - 1 out of every 150 (0.67%) between 2000 and 2002
 - 1 out of every 68 (1.47%) between 2010 and 2012



Epidemiology

- North American study (2014)
 - Racial differences in the prevalence of ASD are narrowing.
 - Rates for African Americans and Hispanics are matching those of white populations.
- Distribution by sex
 - The boy-to-girl ratio of 4:1 remains stable over time.

Epidemiology

- Economic cost (European study, 2018)
 - Disability-adjusted life years (DALYs): 207,771
 - 153,153 for men and 54,618 for women.
 - Economic cost per individual within 6 months
 - €797 Romania – €11,189 Denmark.
 - Spending on special education resources tops the list.
 - This is followed by tutored support.
 - Cost of productivity lost by caregiver in 6 months
 - €307.70 Poland – €4,467.40 Austria.
 - North American study (2014): Similar data.

Aetiology

Aetiology

- There is no single or identifiable cause.
 - Cause may be environmental, biological and genetic.
 - A combination of several of these causes is the most likely scenario.
- In most cases, the causes remain unknown.

Aetiology

- Environmental factors
 - There seems to be some evidence that the perinatal period is critical.
 - Abnormal presentation, umbilical cord complications, fetal distress, birth injury or trauma, multiple birth, maternal hemorrhage, birth in summer, low birthweight, small baby for gestational age, congenital malformations, low Apgar score at 5 minutes, feeding disorders, meconium aspiration, neonatal anemia, ABO or Rh incompatibility, hyperbilirubinemia
 - "There is not enough evidence to imply any perinatal or neonatal factors in the etiology of autism"

Aetiology

- Biological factors
 - A higher risk of developing ASD has been related to:
 - Intrauterine exposure to drugs such as valproic acid and thalidomide.
 - **A link between ASD and vaccine application has been ruled out.**
 - “We could assess no significant association between MMR immunisation and the following conditions: autism, asthma, leukaemia, hay fever, type 1 diabetes, gait disturbance, Crohn’s disease, demyelinating diseases, or bacterial or viral infections” (Demicheli, Rivetti, Debalini, & Di Pietrantonj, 2012; pp. 2)



Aetiology

- Genetic factors: studies on sibling populations.
 - The likelihood that one of the two siblings will be affected when the other also is:
 - Identical twins: 36–95%
 - Non-identical twins: 0–31%
 - The probability of having a second child with ASD: is 2%–18%.
 - Risk also increases in children with older parents.

Aetiology

- Genetic factors (Huguet, Ey, & Bourgeron, 2013)
 - There is an identifiable genetic cause in up to 25% of cases: e.g. fragile X syndrome or tuberous sclerosis.
 - The “genetic landscape of ASDs to be highly heterogeneous, with different types of genetic abnormalities located on almost all chromosomes with varying levels of penetrance”.
 - “the identification of a large number of causative genes that converge in common pathways”.
 - “The clinical outcomes associated with the causative genes exceed the boundaries of ASD because the same genes associated with ASD [...] are also associated with other neuropsychiatric disorders, such as schizophrenia and bipolar disorder”.



Pathophysiology

Pathophysiology

- Brain functioning
 - Anomalies have been related to various areas of the brain
 - Brain volume
 - Cerebellum
 - Medial temporal lobe
 - Ventromedial and dorsolateral prefrontal cortex, Broca's area and inferior parietal cortex
 - One finding that has received more attention in recent times is that of mirror neurons (Rizzolatti, Fadiga, Gallese, & Fogassi, 1996).

Pathophysiology



- Brain functioning: Mirror neurons
 - “In area F5 of the monkey premotor cortex there are neurons that discharge both when the monkey performs an action and when he observes a similar action made by another monkey or by the experimenter. We report here some of the properties of these 'mirror' neurons and we propose that their activity 'represents' the observed action. We posit, then, that this motor representation is at the basis of the understanding of motor events. Finally, on the basis of some recent data showing that, in man, the observation of motor actions activate the posterior part of inferior frontal gyrus, we suggest that the development of the lateral verbal communication system in man derives from a more ancient communication system based on recognition of hand and face gestures”.

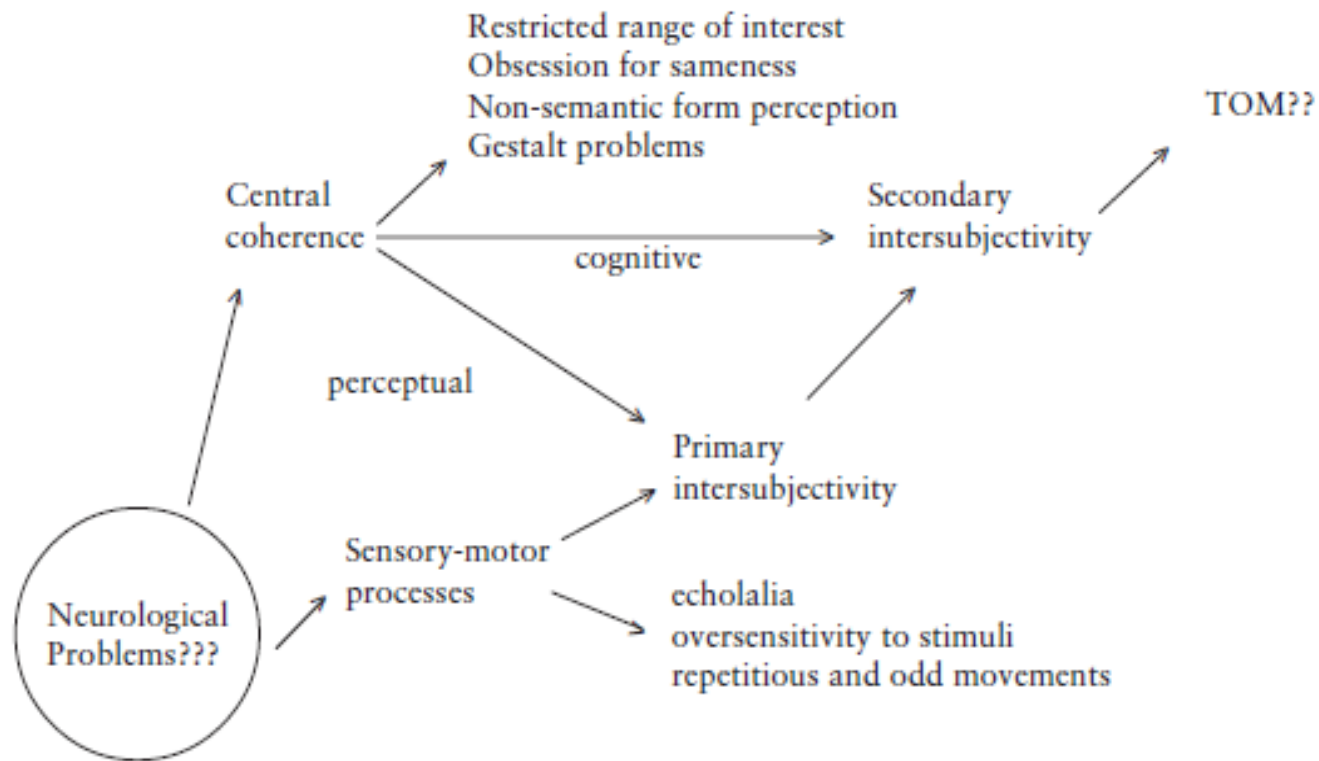
Pathophysiology

- Neurotransmitters
 - Gabaergic, glutamatergic, serotonin, adrenergic and noradrenergic systems
 - Endogenous opiates
 - Changes in oxytocin neurotransmission
- Autoimmune processes
- Antibodies against myelin basic protein
 - Increases in eosinophils and basophils in IgE-mediated responses

Pathophysiology

- Psychological theories: Theory of Mind and Intersubjectivity

FIGURE 2. A NEUROPHENOMENOLOGICAL ACCOUNT OF AUTISM.



(Gallagher, 2007)

Pathophysiology

- Psychological Theories: Psychoanalysis
 - Primitive defense mechanism against the invasion of intense anguish experienced in the earliest stages of life.
 - The 'withdrawal of the world' that occurs as a result would be devastating to the extent that it would compromise the establishment of the necessary bonds that contribute to the structuring and development of the psyche of the individual.
 - Such bonds would then be established on the alternation between the most absolute dependence – which would lead to intense separation anxieties as threatened by the differentiation of the other – and the rejection of any form of relationship – at the risk of being invaded by the presence of the other.

Clinical symptoms

Clinical symptoms

Possible 'Red Flags': People with ASD may

- Flap their hands, rock their body, or spin in circles.
- Have unusual reactions to the way things sound, smell, taste, look, or feel.
- Not respond to their name by 12 months of age.
- Not point at objects to show interest by 14 months.
- Not play 'pretend' games (pretend to 'feed' a doll) by 18 months.
- Avoid eye contact and want to be alone.

Clinical symptoms

Possible 'Red Flags' (2): People with ASD may

- Have delayed speech and language skills.
- Repeat words or phrases over and over (echolalia).
- Give unrelated answers to questions.
- Have trouble understanding other people's feelings or talking about their own.
- Get upset by minor changes.
- Have obsessive interests.

Clinical symptoms

Signs and symptoms related to **social interaction**: People with ASD may

- Not respond to their name by 12 months of age.
- Avoid eye-contact.
- Prefer to play alone.
- Not understand personal space boundaries.
- Not share interests with others.
- Interact only to achieve a desired goal.

Clinical symptoms

Signs and symptoms related to **social interaction** (2): People with ASD may

- Have apathetic or inadequate facial expressions.
- Not understand the boundaries of personal space.
- Avoid or resist physical contact.
- Not feel the consolation given by other people when they are distraught.
- Have difficulty understanding other people's feelings and expressing their own.

Clinical symptoms

Signs and symptoms related to **communication**: People with ASD may

- Experience delay in acquisition of speech and language skills.
- Repeat words or phrases over and over again (echolalia).
- Employ pronominal inversion, i.e. use 'you' instead of 'me' and vice versa.
- Speak in a monotonous, robotic, or treble tone of voice.
- Persevere on a topic of conversation for too long, talking about what they like rather than having a reciprocal conversation with the other person.

Clinical symptoms

Signs and symptoms related to **communication** (2): People with ASD may

- Give answers that are unrelated to the questions asked.
- Use of language in unusual ways.
 - They may not be able to put words into real sentences.
 - They may say just one word at a time or repeat the same words or phrases over and over again.
- Not point or respond when pointed to something.
- Some children with fairly good language skills speak as small adults, unable to express themselves as children are commonly expressed.
-

Clinical symptoms

Signs and symptoms related to **communication** (3): People with ASD may

- Use few or no gestures.
 - They may have difficulty using and understanding gestures, body language or tone of voice.
 - For example, they may not understand what it means to say goodbye by hand.
 - Their facial expressions, movements, and gestures may not match what they are saying.
 - For example, they may smile when saying something sad.
- Not play simulation games (e.g., 'feeding' a doll).
- Not understand jokes or sarcasm.

Clinical symptoms

Signs and symptoms that indicate **unusual interests and behaviors**: People with ASD may

- Be very organized.
- Be irritated by small changes.
- Have obsessive interests.
- Need to follow certain routines.
- Line up toys or other objects.
- Always play with toys in the same way.
- Show an interest in certain parts of objects (e.g. wheels).

Clinical symptoms

Signs and symptoms that indicate **unusual interests and behaviours** (2): People with ASD may

- Flap hands, rock or spin in circles.
 - For example, they may spend a lot of time flapping their arms repetitively or rocking from side to side, turning on and off a light or rotating the wheels of a toy car repeatedly. This type of activity is known as autostimulation or 'stereotyped behaviours'.
- Routines.
 - A change in the usual routine of the day, like stopping on the way home from school can be very distressing, causing them to 'Lose control' or have a 'crisis' or tantrum, especially if they are in an place they do not know.

Clinical symptoms

Signs and symptoms that **may occur in ASD but are not one of the central aspects of the condition**: People with ASD may display

- Hyperactivity/impulsiveness/low concentration.
- Tantrums.
- Aggressiveness.
- Self-harming behaviours.
- Unusual eating and sleeping habits.
- Mood swings or unusual emotional reactions.

Clinical symptoms

Signs and symptoms that **may occur in ASD but are not part of the central aspects of the condition** (2): People with ASD may display

- Lack of fear or more fear than expected
- Unusual reactions to sound, smell, taste, appearance or touch of things.
 - For example, they may have little reaction or an exaggerated reaction to pain or loud noise. They may have abnormal eating habits such as limiting their diet only to some foods, or eating things that are not edible like soil or stones (pica). They may also have problems like chronic constipation or diarrhea.

Comorbidity

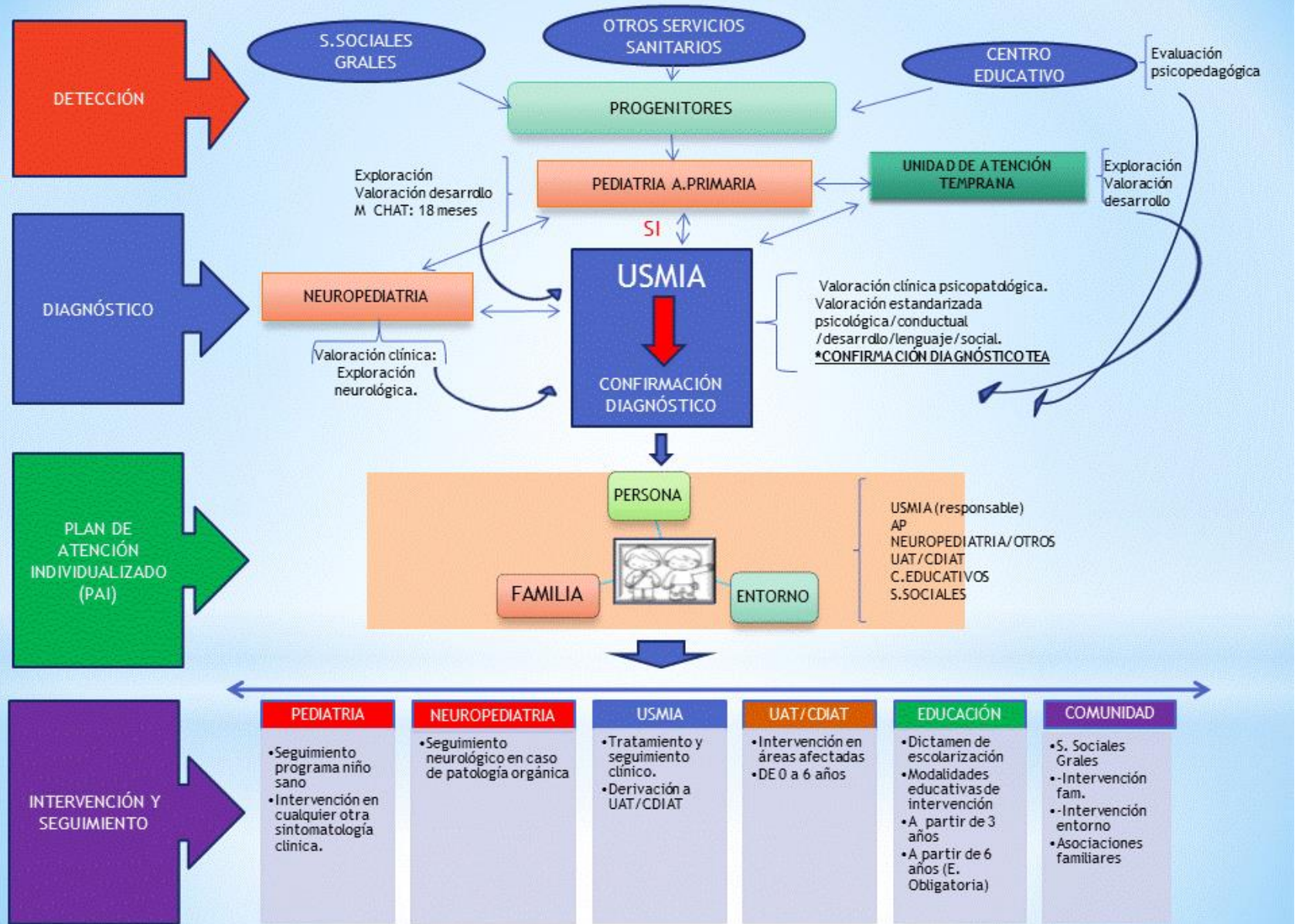
Comorbidity

- Many individuals with ASD have psychiatric symptoms that are not diagnostic criteria for this disorder
 - 70% may have a comorbid mental disorder.
 - 40% may have two or more comorbid mental disorders.
- ASD is often associated with intellectual deterioration...
 - Although almost half of ASD subjects have an IQ that is average or above average.
- ... and structural alterations of language:
 - ASD patients may be unable to understand or construct grammatically correct sentences.
- ASD is also often associated with ADHD, developmental disorder of coordination, anxiety disorder, depressive disorder, etc.

Diagnosis

Diagnosis

- **The importance of early detection**
 - Early detection is fundamental when planning therapeutic interventions.
 - "Diagnosis continues to be a major problem in Europe and more resources are needed to facilitate early detection."
 - First concerns around autism arise, on average, at 25.3 months of life,
 - Parents perceive some developmental problem during the first year...
 - ... and detect alterations in social and communicative skills and in fine psychomotricity at 6 months of age.
 - Paradoxically, diagnoses take place on average of 19 months later, at roughly 44.4 months of life!
 - Just over $\frac{2}{3}$ of parents report delays of over 6 months in accessing diagnostic services.



ALGORITMO DE DETECCIÓN EN PEDIATRÍA

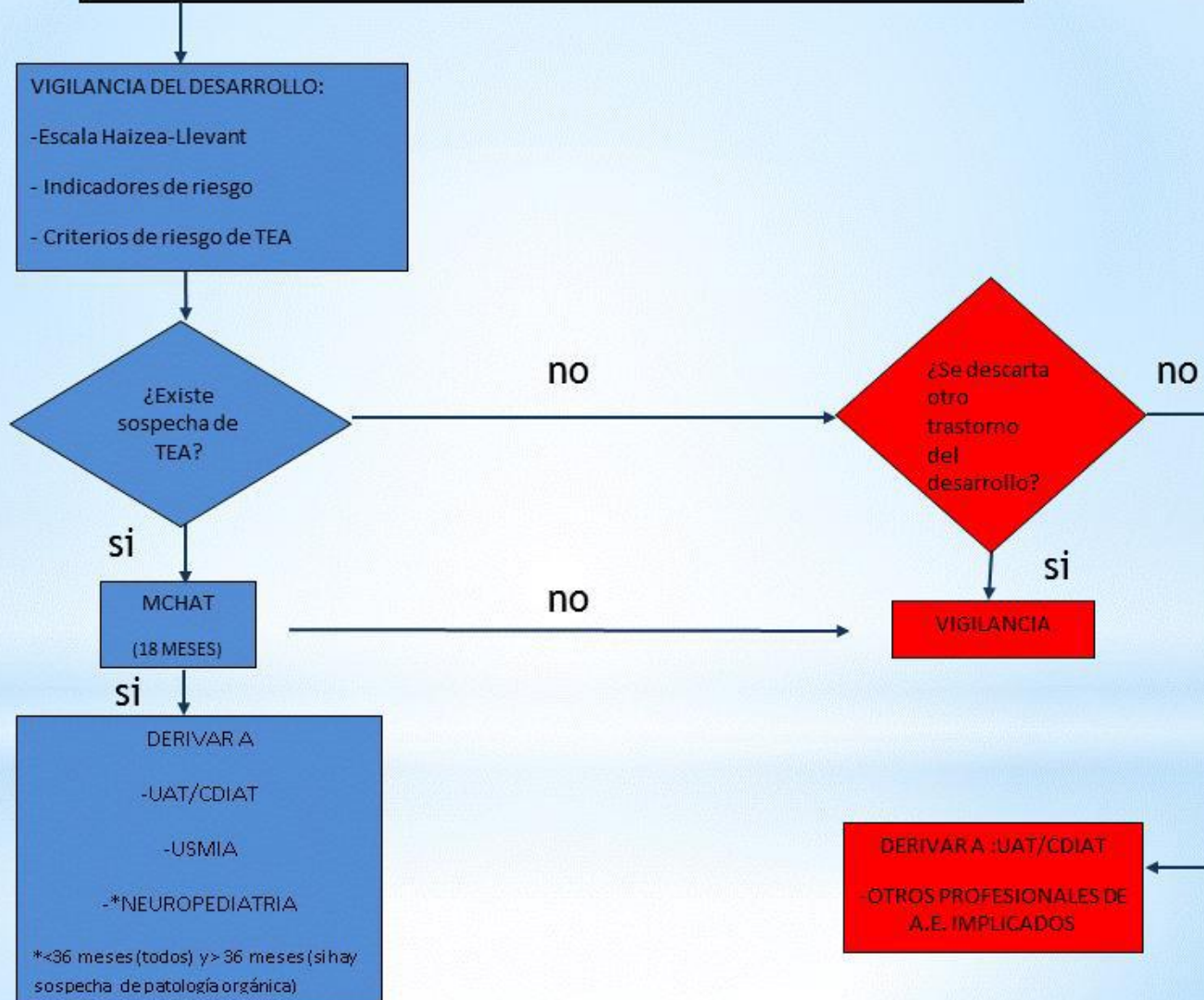
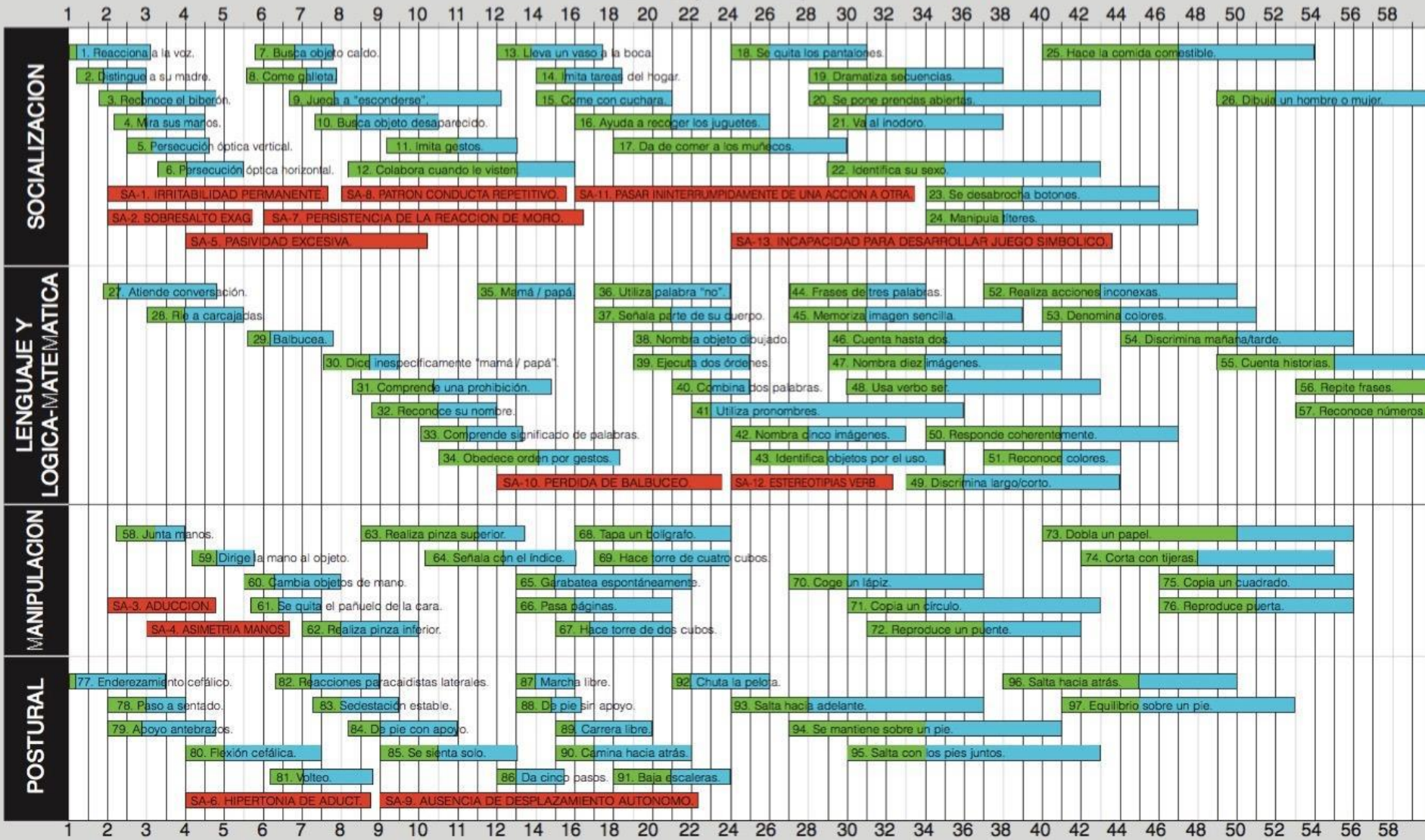


TABLA DE DESARROLLO (0-5 AÑOS) HAIZEA-LLEVANT



Por favor responda a estas preguntas sobre su hijo/a. Tenga en cuenta cómo su hijo/a se comporta habitualmente. Si usted ha visto a su hijo/a comportarse de una de estas maneras algunas veces, pero no es un comportamiento habitual, por favor responda no. Seleccione, resaltando con un círculo. Muchas gracias.

1. Si usted señala algo al otro lado de la habitación, ¿su hijo/a lo mira? (POR EJEMPLO, Si usted señala a un juguete, un peluche o un animal, ¿su hijo/a lo mira?)	SÍ	NO
2. ¿Alguna vez se ha preguntado si su hijo/a es sordo/a?	SÍ	NO
3. ¿Su hijo/a juega juegos de fantasía o imaginación? (POR EJEMPLO, "hace como que" bebe de una taza vacía, habla por teléfono o da de comer a una muñeca o peluche,...)	SÍ	NO
4. ¿A su hijo le gusta subirse a cosas? (POR EJEMPLO, a una silla, escaleras, o tobogán,...)	SÍ	NO
5. ¿Hace su hijo/a movimientos inusuales con sus dedos cerca de sus ojos? (POR EJEMPLO, mueve sus dedos cerca de sus ojos de manera inusual?)	SÍ	NO
6. ¿Su hijo/a señala con un dedo cuando quiere pedir algo o pedir ayuda? (POR EJEMPLO, señala un juguete o algo de comer que está fuera de su alcance?)	SÍ	NO
7. Su hijo/a señala con un dedo cuando quiere mostrarle algo que le llama la atención? (POR EJEMPLO, señala un avión en el cielo o un camión muy grande en la calle)	SÍ	NO
8. ¿Su hijo/a se interesa en otros niños? (POR EJEMPLO, mira con atención a otros niños, les sonríe o se les acerca?)	SÍ	NO
9. ¿Su hijo/a le muestra cosas acercándolas o levantándolas para que usted las vea – no para pedir ayuda sino solamente para compartirlas con usted? (POR EJEMPLO, le muestra una flor o un peluche o un coche de juguete)	SÍ	NO
10. ¿Su hijo/a responde cuando usted le llama por su nombre? (POR EJEMPLO, se vuelve, habla o balbucea, o deja de hacer lo que estaba haciendo para mirarle?)	SÍ	NO
11. ¿Cuándo usted sonríe a su hijo/a, él o ella también le sonríe?	SÍ	NO
12. ¿Le molestan a su hijo/a ruidos cotidianos? (POR EJEMPLO, la aspiradora o la música, incluso cuando está no está excesivamente alta?)	SÍ	NO
13. ¿Su hijo/a camina solo?	SÍ	NO
14. ¿Su hijo/a le mira a los ojos cuando usted le habla, juega con él o ella, o lo viste?	SÍ	NO
15. ¿Su hijo/a imita sus movimientos? (POR EJEMPLO, decir adiós con la mano, aplaudir o algún ruido gracioso que usted haga?)	SÍ	NO
16. Si usted se gira a ver algo, ¿su hijo/a trata de mirar hacia lo que usted está mirando?	SÍ	NO
17. ¿Su hijo/a intenta que usted le mire/preste atención? (POR EJEMPLO, busca que usted le haga un cumplido, o le dice "mira" ó "mírame")	SÍ	NO
18. ¿Su hijo/a le entiende cuando usted le dice que haga algo? (POR EJEMPLO, si usted no hace gestos, ¿su hijo/a entiende "pon el libro encima de la silla" o "tráeme la manta"?)	SÍ	NO
19. Si algo nuevo pasa, ¿su hijo/a le mira para ver como usted reacciona al respecto? (POR EJEMPLO, si oye un ruido extraño o ve un juguete nuevo, ¿se gira a ver su cara?)	SÍ	NO
20. Le gustan a su hijo/a los juegos de movimiento? (POR EJEMPLO, le gusta que le balancee, o que le haga "el caballito" sentándolo en sus rodillas)	SÍ	NO

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The Modified Checklist for Autism in Toddlers, Revised, with Follow-Up™ (M-CHAT-R/F) IS NOW AVAILABLE FOR FREE DOWNLOAD!!!

PRUEBAS ESPECÍFICAS DE TEA

Aspecto a evaluar	Instrumentos
Pruebas de screening	MCHAT
	SCQ
	ESCALA AUTÓNOMA ADI-R
Pruebas de evaluación extensa	CARS
	ADOS
	ACACIA IDEA

Differential diagnosis

Differential diagnosis

- **ASD not specified**
 - Some non-specific patterns seem to involve the same deficits as those associated with autism but do not meet all the accepted diagnostic criteria.
 - Atypicality may refer to the pattern of symptoms, their severity or the age of onset.
 - It is likely to reflect variations in how ASD is presented.
 - Care needs are similar to those for autism.
 - It is not known if such atypicality has etiological implications.

Differential diagnosis

- **Asperger's syndrome**

- Individuals with this condition are intellectually capable and verbally.
- Main features of Asperger's syndrome
 - Satisfactory diagnostic criteria are lacking.
 - Findings may be contradictory due to differences in the definition and selection of samples.
 - Diagnosis tends to be made substantially later than with autism.
 - The syndrome tends to be associated with a higher verbal IQ than non-verbal IQ.
 - It is still uncertain whether Asperger's syndrome and ASD differ in the pattern of neuropsychological deficits.

Differential diagnosis

- **Rett's syndrome**
- This síndrome affects 1 out of every 10,000–15000 girls
 - It is the only pervasive developmental disorder with a known genetic cause: mutation in the X-linked gene that encodes methyl-CpG binding protein 2.
- **Main features**
 - General and psychomotor development are relatively normal during the first 6–18 months of life.
 - It follows a stagnation of development acquisitions and a rapid deterioration in behaviour and mental state, leading to dementia with autistic characteristics in 18 months.

Differential diagnosis

- **Rett's syndrome (2)**

- Main features

- Loss of intentional use of the hands after prior acquisition of the prehensile function.
- Unbalanced ataxia of the trunk and extremities, uncomfortable and unstable gait, and acquired microcephaly.
- After a prolonged period with a relatively stable mental state for years, other neurological anomalies arise, especially lower extremity spasticity and epilepsy.

- No specific treatments exist.

- Animal studies suggest that neuronal degeneration may eventually be reversible.

Differential diagnosis

- **Infantile disintegrative disorder or Heller's syndrome**
- This disorder is very rare: prevalence rate is 0.2 per 10,000 people.
 - Main features
 - Development is apparently normal during the first two years.
 - Symptoms include loss of receptive and expressive language and motor coordination, development of fecal and urinary incontinence, social withdrawal, hand stereotypes and simple rituals similar to those observed in autism.
 - Deterioration continues for several months before reaching a plateau. This condition is often difficult to distinguish from autism combined with the intellectual deterioration.
 - In some cases, deterioration progresses with increased motor dysfunction, epileptic seizures and localized neurological deficits.

Differential diagnosis

- **Infantile disintegrative disorder or Heller's syndrome (2)**
 - Main features
 - Very few cases of infantile disintegrative disorder are due to cerebral lipoidosis or leukodystrophy.
 - It is unknown whether this disorder constitutes an atypical variant of ASD or is a significantly different syndrome.

Differential diagnosis

- **Receptive-expressive language disorders**
 - These disorders are frequent reasons for the early referral of children with ASD.
 - Deterioration is greater with developmental language disorder than with ASD.
 - **Main features**
 - Patients display problems with the social-communicative aspects of conversational exchange.
 - Immediate echolalia, major social deterioration and limited symbolic play.
 - Unlike with ASD, patients seldom show stereotyped behaviours or concerns and their non-verbal behaviour (looking at people; using facial expressions and gestures) does not deteriorate.

Differential diagnosis

- **Landau-Kleffner syndrome or acquired aphasia with epilepsy**
 - Main features
 - Development is normal until loss of receptive and expressive language occurs along with the onset of epileptic seizures or transient alterations in the electroencephalogram (EEG).
 - Regression may be accompanied by social retraction and behavioural disturbances, while cognitive functioning and non-verbal motor function remain intact.
 - Sometimes, language is regained.

Differential diagnosis

- **Intellectual disability**

- 50% of children with an intellectual IQ < 50 also have altered social communication skills, stereotyped behaviours and/or language development disorders.
 - Symptoms are similar to the diagnostic criteria of ASD.
 - The condition is classified as ASD No Other Specified.
- In daily practice it is not always easy to determine whether a child has a 'pure' intellectual disability or an ASD-related intellectual deficit.

Differential diagnosis

- **Sensory deficits**
- Hearing
 - Parents of children with autism often visit their general practitioner because they suspect their child is deaf since he/she does not react to his or her name, the closing of doors, etc.
 - Careful history-taking should clarify the situation. This does not preclude carrying out auditory tests possibly complemented with evoked potentials of the brainstem.
- Vision
 - Lack of eye contact causes parents to think their child is blind.
 - An extensive ophthalmological examination can help to make the differential diagnosis.

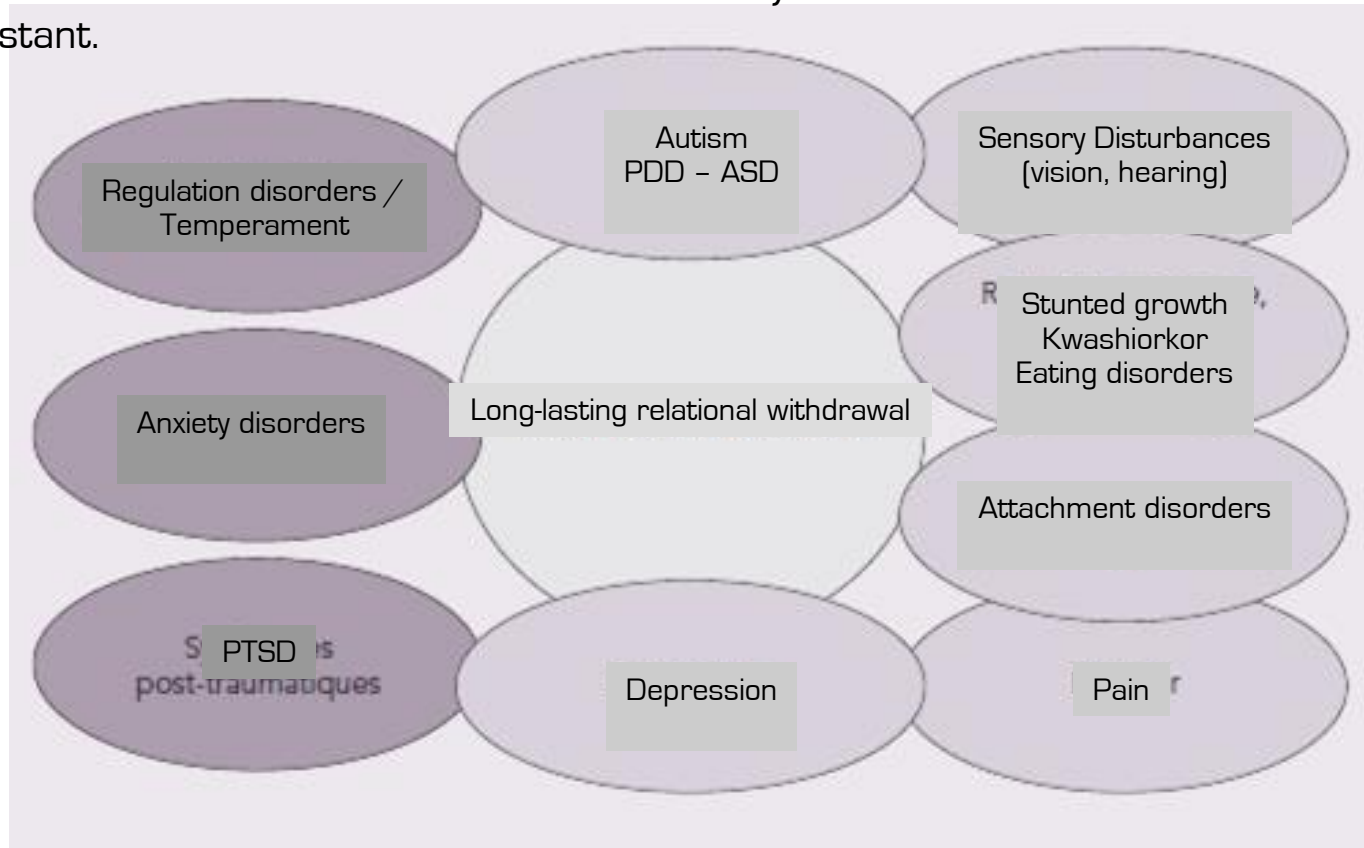
Differential diagnosis

- **Emotional neglect: attachment disorders**
 - Children who have experienced very severe institutional deprivation may show language delay, abnormal social behaviours, and restrictive interests and concerns.
 - In early childhood the clinical picture is more like autism, though there is usually more social reciprocity and the course is different since in latency social disinhibition predominates.
- **Other psychiatric conditions**
 - ADHD, OCD, schizoid personality disorder.

Differential diagnosis

Withdrawal behaviour in early psychopathology

On the right-hand side and shaded lightly are situations in which withdrawal is a constant element of the clinical picture. On the left-hand side and shaded darkly are situations in which withdrawal appears but is not constant.



Guedeney A, Vermillard, M. (2004); L'échelle ADBB : intérêt en recherche et en clinique de l'évaluation du comportement de retrait relationnel du jeune enfant. Médecine & enfance. 2004 Juin, 367-371

Treatment

Treatment

- Main objectives
 1. To facilitate and stimulate normal development of cognition, language and socialization as much as possible.
 2. To diminish maladaptive behaviours linked to autism, such as stiffness, stereotypes and inflexibility.
 3. To reduce or even eliminate specific maladaptive behaviours, such as hyperactivity, irritability and impulsiveness.
 4. To relieve stress and family burden.

Intensive interventions at an early age have shown the most promising results.

Treatment

- Treatment plan
 - Should be tailored, multidisciplinary in its planning and execution. It should include parents, family, school staff and health personnel.
 - Should have objective goals and symptoms on which to work with behavioural-type therapies to control unwanted symptoms, promote social interactions, and increase self-confidence.
 - Should monitor behavior adjustments, adaptation skills, academic performance, social skills, communication skills and interaction with family and companions.
 - Should monitor the patient's medication.

Treatment

- **Psychological Treatment: Early interventions**
- Interventions should begin as soon as possible and:
 - Be highly intensive with at least 20 h/week conducted in individual sessions with the child.
 - Involve, train and support the parents.
 - Incorporate several modules and training plans that stimulate the child's social and communicative functioning in a development-oriented way.
 - Include systematic instruction with individual objectives based on Applied Behavioural Analysis (ABA), with staggered objectives.
 - Focus on generalizing the skills acquired to other environments of everyday life.

Treatment

- **Parental work**

- Families lack information.
 - < 50% of families indicate that professionals spoke to them about their child's specific needs.
 - 20% of families complain that they did not receive any information at the time of diagnosis.
- Specific training needs
- Uncertainty, right/wrong approach
- Cessation of personal activities, limitations in social relations, lack of understanding from close family members and friends.
- Social stigma.
- Absence/deficit/collaboration with other professionals.

Treatment

- **Educational treatment**
 - Extra individual attention with a highly structured approach and special education programmes: 'Aulas CyL'.
 - Teacher-to-child ratio should be at least 1:1 depending on the child's level of disability.
 - Continuity of people, room and even time of techniques should be ensured..
 - Learning techniques and training for parents should be included (with therapists on common programmes and synchronized with the institution).



yo



quiero



comer



verduras



ensalada



carne



pollo



pescado



fruta



beber



agua



leche



batido



zumo



refresco



café



jugar



pelota



muñeca



puzzle



consola



parque



amigos



ARASAAC and the Universidad de Zaragoza

Treatment

- **Pharmacological treatment**
 - Pharmacological treatment has not been shown to affect the central symptoms of ASD.
 - However, such treatment may be considered for addressing comorbid symptoms that do not respond to behavioural interventions.
 - Aggression, temper tantrums, irritability, hyperactivity, self-harm behaviours, stiffness, anxiety, and sleep problems.

Treatment

- **Pharmacological treatment**
 - Typical and atypical antipsychotics.
 - Mood stabilizers/antiepileptics.
 - Antidepressants.
 - Psychostimulants.
 - A2-adrenergic agonists and B-blockers
 - Melatonin.

Treatment

- **Ineffective treatments or treatments with unproven efficacy**
 - More often than for any other psychiatric condition of childhood and adolescence, parents of children with ASD tend to seek complementary and alternative medical treatments for both core and co-morbid symptoms.
 - It is important to respect the parents's opinions, critically discuss the results and risk-benefit of those treatments, advise the family on treatments with and without evidence of support, and help determine whether the treatment is useful by gathering clinical outcome data.

Treatment

- **Ineffective treatments or treatments with unproven efficacy (2)**
 - Ineffective or untested treatments
 - Administration of secretin (gastrointestinal peptide hormone with putative effects on the brain).
 - Sensory Integration.
 - Treatment with vitamin B6 and magnesium.
 - Gluten-and casein-free diets.
 - Treatment of essential fatty acids.
 - Son-Rise programme and cranial osteopathy.
 - Hypochlorite (lye).

La Fiscalía investiga el derivado de lejía que el curandero Pamiés publicitaba para tratar el autismo

[Salud](#)

La decisión del Ministerio Público tiene su raíz en la denuncia que Sanidad presentó sobre este compuesto por un posible delito contra la salud pública

[Nueva multa contra el curandero Josep Pàmies: 600.000 euros por difundir un falso remedio contra el autismo](#)

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APÚNTAME

Outcome and Prognosis

Outcome and Prognosis

- Final outcome varies greatly.
 - 1-10% of patients evolve favorably in adult life.
 - These patients manage to hold down a steady job and form a family.
 - This percentage depends on the initial diagnostic criteria.
 - Usually, these are children with an executive IQ > 70, verbal communicative language at 5 years, and ability to acquire social skills.
 - 20% of patients have an intelligence within normal limits.
 - 30% of patients suffer mild or moderate mental retardation.
 - 50% of patients suffer severe or profound mental retardation.
 - In general, the prognosis for these patients is poor.
 - 60-66% suffer severe deficits and lack of social progress and independence
- Some cases of very bad prognosis: inability to maintain any kind of

Outcome and Prognosis

- Dramatic changes in adolescence
 - Worsening mental state
 - 30% temporary deterioration.
 - 22% permanent deterioration.
 - Emergence of:
 - Hyperactivity, aggression and destructiveness, loss of language skills, intellectual deterioration.
 - Onset of symptoms of epilepsy
 - Grand-mal type in 11-29% of cases.
 - Self-aggression/suicidal behaviours.
 - Suicide and epilepsy are two leading causes of mortality.
 - Increase in premature mortality.
 - 18 to 30 years earlier than with people without ASD.

Evolution and Prognosis

- Follow-up study (n = 135) with patients up to 21 years of age
 - 16% of participants (22 cases) developed a new psychiatric disorder:
 - Not only of a worsening of the pre-existing autistic characteristics
 - 5 participants developed obsessive compulsive disorder and/or catatonia.
 - 8 participants developed affective disorders with marked obsessive features.
 - 3 participants developed complex affective disorders.
 - 4 participants developed specific affective disorders.
 - 1 participant developed bipolar disorder.
 - 1 participant developed acute anxiety complicated with alcohol abuse.
 - **No case** of schizophrenia was recorded.





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