POSITIVE AND DIFFERENTIAL DIAGNOSTIC CHALLENGES IN A PATIENT WITH ASPERGER SYNDROME

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ABSTRACT
Asperger syndrome (AS) it became part of one umbrella of autism spectrum disorder (ASD) in DSM-5, being typical distinguished by intellectual ability and no significant learning disabilities. The children with AS usually present difficulty with social interactions, impairment in understanding the use of gestures or sarcasm , restricted interests and repetitive behaviors; they may have distinctive strengths like: over-focus, aptitude for recognizing patterns and attention to detail; but also challenges like: hypersensitive (to lights, sounds, tastes), difficulty with the give and take of conversation, difficulty with nonverbal conversation skills (distance, loudness, tone), uncoordinated movements, clumsiness [1].
The average age of Asperger diagnosis was reported, in CDC report in 2008, at age 6. A 2007 British study reported further delay in Asperger diagnosis- averaging around age 11 [2].
A difficulty in diagnosing Asperger syndrome is that many of these children are better in interacting with adults, so to recognize their social difficulties; it may need to observe how they interact with their peers. As the social behavior rules get more complex, difficulty with social interaction become more obvious.
The girls with Asperger Syndrome tend to have a delay in being diagnosticated, or even under identified due to a better mechanism of coping: observing and then participating by imitating others, even if that is no too appropriate for the current situation, and being usually polite, well behaved. An investigation of the ''girls camouflage effect'' in autism, using a computerized ADOS-2 and a test of sex differences, showed that girls are better on non-verbal communication, tending to use gestures more vividly, and they have improved communication skills over the lifetime [3].
In this article, we will describe the positive and differential diagnostic challenges in a patient with Asperger Syndrome, identified at age of 12.

CASE REPORT:

We have chosen to present the case of a teenage girl, with Psychotic episode, mainly with delusional ideas: "she is having an imaginary family that spokes to her and gives her orders to buy things, and even touch her'', and "she believes she was reincarnated at 3 years old" it's the way that her mother describes her behavior. The patient, aged 12, raised in an urban area, is admitted for the first time in Child and Adolescent Psychiatry Department, from "Prof. Dr. Alex. Obregia" Psychiatry Hospital, presenting symptoms which developed in time and that in the last few months, causes significant decrease of social and school functionality: "she is very quiet, withdrawn, she has only passage marks, she doesn't help anymore in the house; she doesn't want to take a bath".

Lately, she spent a lot of time on internet, watching horror movies or web sites with horror, scary, real or invented horror stories,

dedicated to people with paranormal passion. She was sharing all those information with other teenagers that she met on the internet, and never in real life.

Her mother remembers that the patient started talking about imaginary friends at the age of 9. The patient has beliefs that she was not raised by her biological mother "being reincarnated at 3 years old". 2 weeks prior the hospital admission the patient started to believe that has an imaginary family with whom she communicates with the power of the mind.

The mental status examination at the moment of admission is dominated by her negative attitude, avoiding eye contact and trying to cover her face with the hair. Mimics and gestures are retained, but with a particular and sometimes bizarre aspect. Her short answers are accompanied with facial grimaces. Her posture is in opposition with the interlocutor, looking almost constantly to the floor. Verbal contact is difficult to initialize and she is not able to maintain a conversation. She has no spontaneous speech, she answers shortly. The ideo-verbal flow accentues discretely when she speaks about her interested areas: telekinesis, animees, rhymes, horror movies. She denies modification of her perception, but during the hospitalization, she revealed delusional ideas that are persisting since age of 5-6 about her power of reading thoughts of her mother and sister, and the capacity of moving things using the concentration. Also, strange believes that every 13-th day of the month, at 3 AM, are happening horror actions: "last month I stayed awake, and I have seen and felt some big arms coming out of the walls". About her imaginary family she talks only with her mother: "i have seen my brother, he tells me to buy sweets".

Elements of depressive mood were present, such social withdrawal, restriction of interests. During the hospitalization she constantly looked for a socially isolated place where, she could use her phone, avoiding any conversation or group activity.

Her mother describes that it was always difficult for the patient to socialize with other kids, since kindergarten, and actually she has no friends to go out, and her classmate's considered her strange.

The relationship with her family is under tension: "she is always fitting with her grandmother", "she doesn't want to speak with me, she says I'm her enemy", "she refuse to speak with her father, or to spend time with her sister", "she is being almost physic aggressive with us, when we try to take her phone, because she is doing nothing else, then using it".

Her mother remembers that the patient presents a hiperselectivity for textures: such as refusal to wear underwear, since early childhood. Her appetite is selective, increased for sweets and she is overweight: "she eats a lot of sweets, saying that she is sharing with her imaginary brother".

She admits that she falls asleep late in the night, because she is using her phone.

Heredocolateral history is significant in this case. Her sister, 16 years old, is suffering from Rett syndrome, receiving palliative care at home, from her mother and grandmother. They all live in a 3 -room apartment; her father works in other country, their parents are separated since she was 5.

She is the second child of the family, coming from a normal pregnancy, born in term, with a good postnatal adaptation, a normal motor development and acquisition of expressive language around the age of two.

She went to kindergarten at 3, where she was socially withdrawn, she had no friends. "She was never opened to talk to us about what it's in her mind". In present, she is in the 6th grade, with good school performance until few months ago. She was a child used

to participate in academic competitions, but for a few months since it began to change in behavior and concepts, school results have dropped a lot. In the childhood, at age of 5, her mother noticed that she had ipsation crises, which got worse at 11. A year prior the admission, the girl was evaluated in a neurology department, where there was performed an awake and sleep EEG, that showed pathological grafoelements. A brain CT scan was also performed with normal results. Also, endocrinological and gynecological consults were done, with normal results.

After purchasing anamnestic data, and establishing psychiatric and clinical exam, we considered the diagnosis of Acute Psychotic Disorder grafted on Asperger's Syndrome.

In order to establish the positive diagnosis we tried to eliminate other pathologies with similar symptoms.

DIFFERENTIAL DIAGNOSIS:

During hospitalization we repeated the awake EEG test, which showed asymmetric trace with spike and wave complexes, but without clinical manifestation. Also the neurological exam was normal, so we excluded a phenomena associated to epilepsy.

Brain imaging- CT scan, excluded the presence of an intracranial expansive processes. A psychological examination was performed, and revealed an IQ of 104.

The mental state assessment, which included applying psychometric instruments (PANSS, CAST) provided sufficient evidence to confirm the positive diagnostic of Acute Psychotic Episode grafted on Asperger's Syndrome.

The most difficult differential diagnosis was with schizotypal disorder, but the patterns of social interaction in childhood and heredocolateral history, clarified the diagnosis.

During hospitalization, she received antipsychotic treatment, with Aripiprazole- 10 mg a day, with difficult compliance at the beginning. After few days, the evolution of the patient was favorable with improvement of the mood, sleep and compliance for the treatment. She didn't mention anymore about her imaginary family, until she was discharged from the hospital.

She returned for hospitalization, one year later, at initiative of her mother, because of her irritated mood and of the persistence of the delusional idea. She continued treatment with Aripiprazole 10 mg, daily. Additionally, it was associated a mood stabilizer, Valproate 600mg, daily, with an improvement of her attitude toward her mother and medical staff, becoming more cooperative.

The significant heredocolteral history in this case, (her sister's diagnosis of Rett syndrome and necessities of palliative care), the persisting delusional ideas, the patient's family type with separated parents, rigid boundaries and no friends, no social relationships outside the family and work obligations, are representing strong negative prognosis factors.

CONCLUSIONS

The diagnosis of Asperger Syndrome in our case was made at age of 12, when our patient presented for the first time in a service of pediatric psychiatry. Her social difficulties, observed from kindergarten, were not an important factor for the family, until the moment when she become withdraw and associated delusional ideas.

There is evidence that Asperger syndrome is associated with delusional beliefs. Cognitive theories of delusions in psychosis related literature propose a central role for impaired theory of mind ability in the development of delusions. People with developmental disorders frequently have psychiatric comorbidities and problematic emotional reactions and behaviors. Also, the core symptoms of Asperger syndrome's disorder often mask the symptoms of a comorbid condition.

A study regarding co-occurring psychopathology and differences in girls and boys with Asperger syndrome, showed that girls are at greater risk for developing anxiety, depression, suicidal ideation and for psychiatric hospitalization; boys appear to be at greater risk for co-occurring ADHD, OCD and tics [4].

It is known that symptoms of Asperger's syndrome have some overlap with those of schizophrenia, but less is known about comorbidity between these two syndromes. An article describes a sample of 18 adolescents with early onset schizophrenia.

Ten adolescents fulfilled symptom criteria of Asperger's syndrome after the onset of schizophrenia, while only two persons had Asperger's syndrome before the onset of schizophrenia, a prerequisite for diagnosis. 44% of the adolescents fulfilled the diagnosis of some pervasive developmental disorder in childhood [5].

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