



CASE REPORT

Differential Diagnosis of Psychotic Process in Adulthood Autistic Spectrum Disorders: Case Series

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ABSTRACT

Schizophrenia is a psychiatric disorder that usually begins at an early age when significant disturbances are seen in feelings, thoughts, and behaviors, where the patient is distracted from the facts and has problems in interpersonal relationships and social withdrawal. Autism is a neurodevelopmental disorder that prevents brain development, which causes limited and repetitive behaviors that damages social interaction and communication. Although the differences between schizophrenia and autism have been revealed at the theoretical level, especially in high-functioning autism, inability to be diagnosed at an early age, the similarity of symptoms has led to the confusion of these two disorder symptoms in later life. In adulthood, the bizarre speech in autism patients, strong and irrevocable beliefs, can be confused with disorganized speech and delusions in patients with schizophrenia. When differentiating between the two disorders, it is emphasized that the more commonly held thinking is based on a logical basis. In this study, three cases with differentiating diagnosis of autism and schizophrenia were reported.

Keywords: Schizophrenia, autism, Asperger's syndrome, adult autistic spectrum disorder, differential diagnosis

INTRODUCTION

Schizophrenia is considered to be a heterogeneous syndrome with unknown etiology, symptomatology, course and end result differences, and basically depends on clinical criteria. The most frequently affected areas are perception, cognition, language, memory, emotion, desire, and adaptive behaviors (1). Autism is a life-long developmental disorder that affects the perception of an individual's stimuli in the outside world and the organization and use of the information he receives. There are two main criteria for the diagnosis of autism: permanent impairment of communication and social

interaction, as well as changes in behaviour patterns. These functional models come from early childhood, limit the functioning of the individual, create problems of social dissonance, and form the basis for the emergence of psychiatric comorbid conditions such as psychotic disorders (2). The differences between schizophrenia and autism are explained at the theoretical level. However, it is known that the symptoms of autism may be confused with psychotic symptoms (3). It is thought that individuals with autism spectrum disorder (OSD), especially those with high function, are diagnosed late and this disorder is confused with mental retardation and schizophrenia in later ages (4). The bizarre speech that can be seen in autistic patients is often confused with the disorganized speech typical of schizophrenia. Again, strong beliefs and adherence to these beliefs in the OSD can resemble other diseases. So this situation can be confused with delusional thought content. The difference is that schizophrenia lacks a logical basis that follows the path to the outcome

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of thought. In autism, however, there is a situation that matches the reality parameters. Similarly, the absence of individual impairment of self-awareness in autism differentiate patients with autism from schizophrenia (5).

Schizophrenia and autism-like disorders are disorders in which there are difficulties in differential diagnosis due to their specific characteristics. In order to better understand this differential diagnosis process, we examined the treatment process of three patients with different psychological problems and social adjustment levels and the variables affecting them. The disease-related characteristics were assessed with the Wechsler Adult Intelligence Scale, the Autistic Spectrum Quotient, and the Positive and Negative Syndrome Scale. The cases were approved by the local community and their relatives, and the administration of the scales was approved by the local ethics committee (Adiyaman University Ethics Committee Protocol Number: 2018/2-4).

CASE PRESENTATIONS

CASE 1

A 24-year-old male patient was admitted to emergency service due to behavioral changes and a tendency to harm the environment. According to the information received from the family, the patient began to socially withdraw four years ago and recently had difficulty in perception. He animates the evil character in an animated movie and behaves like some other characters from the same movie. He reported he received religious messages. There were no remarkable abnormalities in the history of pregnancy

and childbirth. He had difficulties in language development and social areas. There was a limited circle of friends and was away from crowded environments. His mother's cousin had a psychiatric treatment with a psychotic disorder. The difficulties in social interaction were exacerbated at the beginning of middle school when they were in a new environment where there was no previously known schoolmate. It was mentioned that it was difficult to understand the jokes and abstract expressions made by their peers. After successfully completing his education with his family, he went to internship training and found a job after the internship was over. The ability to cope with the process leading from the student to the working life decreased. It was observed that the patient was in a business alliance. However, while waiting in the outpatient clinic, he avoided being in a crowded environment. He was not even talking to family members while he was out on his own. In the Wechsler Adult Intelligence Scale (WAIS) (6), all subscales were in the normal range except for the "understanding" subscale, which assessed the ability to understand social situations. He received a high score in the Autistic Spectrum Quotient (AQ) (7), which measures the difficulties experienced by the social area. At follow-up interviews, it was learned that the patient could stay in crowded places for up to one hour (Table 1). During the process, the patient re-joined his academic activities, but was observed to have an anxious attitude in the context of interacting with his classmates. Also, one of his favorite everyday activities is walking a few kilometres alone. Difficulties in understanding social messages prevented him from interacting with other people. The social interaction with the initial antipsychotic

Table 1: Psychiatric scales comparison and evaluation of cases

	Case 1	Case 2	Case 3
Wechsler Adult Intelligence Scale			
CI Verbal	88	126	122
CI Manipulative	112	100	131
CI Total	98	116	129
Positive and Negative Syndrome Scale			
Positive Symptoms	15	8	33
Negative Symptoms	18	26	31
General Psychopathology	40	31	41
Autistic Spectrum Quotient	36	28	26

(aripiprazole 5 mg/day) treatment was partially increased, the misinterpretation of social messages was partially reduced, and the academic field attention was slightly increased. No feature was found when the mood statement of the past was examined based on DSM-5 criteria (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition).

CASE 2

A 30-year-old male patient was admitted to emergency service due to behavioral changes reported by the family. Over the last few months, he has developed a nutritional habit of starting to refuse food on the grounds that they are contaminating. It was learned that he did not wash his face; he had no haircuts and beard shaved. When assessed according to DSM-5 on the patient's history, there was no indication of mood disorder, but he had childhood epilepsy with a good clinical course with treatment and did not have any seizures for a long time. Asperger's syndrome was diagnosed at the age of about 18 due to behavioral problems. When retrospectively interviewed, it was learned that there were no psychotic symptoms at that time. He was in a calm mood in his admission to the emergency service. He demanded a walk in the corridor for a while to calm down. The insight was impaired but showed no signs of insecurity. He accepted the treatment. His mother said that although he was not diagnosed with Asperger's syndrome until his 18th birthday, he noticed something strange in his son during his childhood. The patient said that his friends were laughing at school because of his very official talk. It

was learned that his academic performance was excellent until the end of the high school, but gradually became stagnant after finishing the high school. After high school education, he began to spend most of his time at home with his mother and his little brother. He frequently said that he would prefer to travel alone on a long walk or have a bus travel, and showed an extreme interest in natural sciences. As the interview progressed, he was more relieved, and his delays were less evident. Also, as the interview progressed, the reasonless smiles diminished. The irritability of the patient was significantly reduced with antipsychotic treatment (olanzapine 2.5 mg/day). Overly obsessing about hygiene, sleeping, and eating habits continued during the following outpatient clinic follow-ups. The WAIS and AQ were administered.

CASE 3

A 23-year-old male patient was brought to the Emergency Department of our hospital due to traffic disruption behaviors in front of his house. He reduced his sleep hours for a month and voluntarily began to use words related to nature. He neglected his basic duties, began to show extreme indulgence on the games played on the internet, and had fewer meals. He has been followed by a psychiatrist for the last 3 years due to psychotic symptoms. He has not been on medication for the last couple of months. His father had a history of antidepressant use with obsessive-compulsive disorder. He described his school days as a "Hell". He had difficulty in interpersonal relationships. For this reason, during the age of adolescence, he made contact with people only through

Table 2: Comparison of cases according to schizophrenia and autism criteria

DSM-5 Criteria	Case 1	Case 2	Case 3
Schizophrenia Spectrum and Other Psychotic Disorders			
Delusion	X	?	X
Hallucination	X		
Disorganization	X		X
Bizarre and Disorganized Behavior	X		X
Negative Symptoms	X	X	X
Autistic Spectrum Disorders			
Constraint in Social Communication	X	X	X
Stereotypic Behaviors	X	X	X

DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition

computer games on the internet. As the interview progressed, he appeared more relaxed. He said that he was sensitive to the voice and he said that walking with fast steps relieves him. He attributed his behavioral problems to loneliness and frustration, the consequences of not establishing and maintaining fulfilling relationships. He was in sceptical comments about the surroundings and colours, and he said that he felt environment as blue. When asked about the relationship between color and his perception, he said it was the translated words of a song. He said that the blue word means an eternity. No mood symptoms were identified per DSM-5 criteria. The patient responded well to treatment with antipsychotic (quetiapine 150mg / day), but the mood statement and intellectual rigidity remained persistent. The WAIS and AQ results were recorded.

DISCUSSION

On the basis of the given three cases; the presence of symptoms specific to autistic spectrum disorders is observed at a high rate. The complaints of patients relating to autism are becoming more evident in changes in the environment. Internet games and digital platforms often help them to get in touch with the outside world (8). On the other hand, we observe the existence of limited areas of interest in all three cases. These people generally develop their interest in science and technology and become almost experts in their subjects of interest. Similarly, behaviors (habits) in certain areas are common, and these behaviors observed in the three presented cases reveal a relaxing component of them. In terms of delusions; these are evident in the first and third cases, but it is more difficult to surface in the second case. The patient reported that he did not want to eat the food he was afraid of being contaminated. Examination of these ideas were put forward cultural elements that support this belief. Moreover, the patient exhibited a common attitude in this context and showed that he did not care that the content of the interview was recorded in digital media. This clear and willingness behavior is almost impossible to assess in psychotic patients, whose

often delusional content is hidden. However, it seems difficult to differentiate between the delusional content of psychosis and the mental involvement of autistic disorders (5).

The psychometric evaluations of the patients gave remarkable results. First, the negative symptom subscale and general psychopathology scores were similar, although the scales that made the best discrimination between both disorders were subscales of positive symptoms. Given the frequency of positive symptoms (delusions and hallucinations) in psychotic disorders, these results were found to be more accurate. The WAIS typically provides a model for people with autism spectrum disorders. They tend to exhibit a significant inconsistency between the two domains assessed verbally and manipulatively, which leads to better performance in manipulative field tests (9). In Case 1, the verbal score obtained by the patient was remarkable (CI 88) (Table 1). Finally, autistic spectrum ratio scores in three patients were significant. The cut-off point to predict the presence of a possible autistic disorder is estimated to be 26, while 32 is the mean of Asperger's syndrome (10). The cases received a score equal to or higher than the cut-off points. However, this scale is insufficient to exclude a psychotic process, as it can provide a certain overlap with the negative symptomatology found in schizophrenia-like disorders.

As a result; the presence of psychotic symptoms in autism spectrum disorders suggests the possibility of a shared ground for both disorders. Early recognition is important to further determine the differential diagnosis of these disorders and to reduce the complexity of diagnosis observed in adulthood. This results in a better outcome following people with autistic spectrum disorders. Due to the fact that misdiagnosis would only focus interventions on the management of psychotic symptoms it would also limit the appropriate approaches to the difficulties experienced by individuals with autism.

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