

Comorbid Asperger's Syndrome and Schizophrenia and use of Clozapine

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ÖZET:

Asperger sendromu ile şizofreni birlikteliği ve klozapin kullanımı

Asperger sendromu ve şizofreni birlikteliği ile ilgili şüphe vardır ve bu hastalığın tedavisini etkilemektedir. Asperger sendromu ve şizofreni tanı birlikteliğinde çoğunlukla risperidon kullanılmıştır. 26 yaşındaki erkek hastada son 2 yılda giderek artan miktarda, uykusuzluk, iritabilite, agresif davranışlar, referans, perseküsyon ve düşünce yayınlanması hezeyanları, daha önceki ilgi alanlarına karşı zevk alamama şikayetleri ile servise yatırıldı. Klinikteki ilk değerlendirmesinde pozitif ve negatif sendrom skalası (PANSS) puanı 109'du ve klozapin 12.5 mg/gün başlanarak, doz arttırımı ile 200 mg/ güne yükseltildi. Çocukluk çağında stereotipik ve değişik ilgi alanları nedeniyle Asperger sendromu tanısı almış. Hastanın tedavisinin 7. haftasının sonunda PANSS skoru 65 puana geriledi. Klozapin, Asperger sendromu ve şizofreni birlikteliğinde güvenilir ve etkin bir tedavi ajanı olabilir.

Anahtar sözcükler: Asperger sendromu, şizofreni, klozapin

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ABSTRACT:

Comorbid Asperger's syndrome and schizophrenia and use of clozapine

There is a debate concerning comorbid Asperger's syndrome and schizophrenia which eventually influences patient management. Comorbid schizophrenia with Asperger's syndrome cases have been mostly treated with risperidone. A 26 year old man with insomnia, irritability, aggressive behaviors, delusions (reference, persecutory and thought broadcasting), auditory hallucinations, and loss of pleasure in his interests for two years was admitted to our inpatient unit. His initial assessment, according to the positive and negative syndrome scale (PANSS) was 109 points and clozapine 12.5mg/day was initiated and titrated up to 200mg/day. In his childhood he had been diagnosed with Asperger's Syndrome because of stereotypic behaviors and odd interests. He was discharged with a PANSS score of 65 points at week seven. Clozapine might be a safe and effective treatment choice in patients with co-morbid Asperger's syndrome and schizophrenia.

Key words: Asperger's syndrome, schizophrenia, clozapine

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INTRODUCTION

In the past decades there has been a tendency to attribute all psychiatric problems in children and adults with autism to autism itself (1). Recently, investigators have debated accepting behaviors and symptoms, that had been considered additional or associated features of autism spectrum disorders, as potentially indicating the presence of comorbidities warranting additional diagnosis (2). However, the overt presentation of individuals with Asperger's syndrome (AS) and schizophrenia may not be always clear, and under-diagnosis or misdiagnosis is accepted as a rule rather than an exception (3). Comorbid conditions may almost always complicate patient management; thus, accurate and reliable diagnosis of comorbid psychiatric disorders in patients with AS may

require more specific treatments as much as possible. Comorbid schizophrenia and AS cases have been mostly treated with risperidone and in two cases with clozapine with mild to moderate improvement in psychotic symptoms (3,4). Here, we aimed to present an AS case with co-morbid schizophrenia and its treatment with clozapine after trials of various atypical antipsychotic agents.

CASE REPORT

A 26 year old single man, who left his education in graphic design at a university, presented with insomnia, irritability, aggressive behaviors, delusions (reference, persecutory, and thought broadcasting), auditory hallucinations, and loss of pleasure in his interests for two years. His mental examination: Communication was

limited and without eye contact. Speech was disprosodic and circumstantial and the content was poor. Affect was limited and mood was irritable. There were auditory hallucinations and behaviors related to those hallucinations. Reference, persecutive, and thought broadcasting delusions were present. Insight was insufficient to the illness. There was no abnormality in his physical examination and laboratory tests. The findings of magnetic resonance imaging were nonspecific. In his electroencephalography, theta and delta wave activity were observed. His initial positive and negative syndrome scale (PANSS) score was 109 when he was accepted into the inpatient service. Clozapine 12.5mg/day was initiated and titrated up 200mg/day. In the second week of the inpatient period, the PANSS score was decreased to 80 points, and a gradual decrement in PANSS scores was seen in subsequent weeks. His limited affect and social withdrawal improved mildly. The scores of positive symptoms such as hallucinations and reference and persecutory delusions decreased. The frequency of aggressive behaviors of the patient was decreased and loss of pleasure improved. At week seven, he was discharged with a PANSS score of 65 on 200 mg/day clozapine monotherapy and he has been under the same regimen since then without any decompensation.

In his past history, other than delivery with vacuum, his birth was uneventful. He experienced 3 febrile convulsive episodes when he was 3 years old, but no treatment was suggested then. Haloperidol and carbamazepine were used for hyperactivity and inattentiveness symptoms in childhood. He also demonstrated the following during his childhood: Watching documentary films for long periods, great interest in the hardware of computers, going into details while drawing or painting, difficulty in summarizing histories easily, and poor relationships with friends. In his adolescent years, social withdrawal, odd interests, failure to interact with others, and impairment in school and daily activities were more dominant than hyperactivity and he was diagnosed with Asperger's Syndrome. During adolescence, risperidone or quetiapine, paroxetine and olanzapine were prescribed because of irritability and aggressive behaviors without an improvement in his complaints.

His mother was diagnosed and treated for depression after her son was diagnosed with AS. His sister was diagnosed with a psychotic disorder not otherwise specified and quetiapine 200 mg/day was prescribed for her.

DISCUSSION

Here we presented an AS case with comorbid schizophrenia whose psychotic symptoms were resistant to various antipsychotic treatments. In treatment resistant schizophrenia, clozapine has been shown to have a 30-60% response rate or significant improvement (5). In the literature, we found seven case reports about comorbid AS and schizophrenia comorbidity and their treatment. Only, two of these seven cases were reported to be treated with clozapine (3,4). In addition, some authors have suggested that, after failing to respond to an atypical antipsychotic, switching to clozapine was more effective than switching to another atypical antipsychotic (6). Thus, in the absence of other suggestions in the literature we diagnosed the current case as treatment resistant AS with psychotic symptoms and determined that clozapine was the treatment of choice.

As we expected, there was modest improvement in positive and mild improvement in negative symptoms of the present case. Mild to modest improvements have been reported in the literature dealing with AS and schizophrenia treatment (3). The characteristic negative symptoms of schizophrenia such as emotional flattening, social withdrawal, apathy, poor initiative, and reduced concern for personal hygiene are also observed in Asperger's syndrome (7). Thus, we speculated that mild improvement in negative symptoms, according to the PANSS scores, might occur, although the clozapine treatment effect might be due to the overlapping of core symptoms of AS with negative schizophrenic symptoms, because the daily functioning of the index patient was improved meaningfully (e.g. taking a computer course, better self-care, and expressing his views).

Clozapine also has been mentioned to have anti-aggressive effects, independent from antipsychotic influences, in treatment resistant schizophrenia (8). In the present case, our treatment outcome also supported this conclusion; behaviors such as beating or hitting of his relatives improved and these incidents were not related to the content of his delusional thoughts or auditory hallucinations.

In conclusion, treatment choices in comorbid AS and schizophrenia symptoms are lacking. Most of the reported cases in the literature are about treatment with risperidone (3). In addition, the improvement of psychotic symptoms in comorbid AS and schizophrenia has not been well

studied and requires further investigation. Clozapine might have modest effects towards aggression, positive and

negative symptoms in patients with comorbid AS and schizophrenia.

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