A Case of Tourette Syndrome: Response To Aripiprazole Treatment

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ÖZET

Aripiprazol tedavisine yanıt veren bir Tourette bozukluğu olgusu

Tourette bozukluğu, motor ve vokal tiklerle seyreden nöropsikiyatrik bir sendromdur. Özellikle haloperidol ve pimozid olmak üzere, antipsikotik ilaçlar Tourette bozukluğu tedavisinde uzun süredir kullanılmaktadır. Yapılan son çalışmalarda, Tourette bozukluğu tedavisinde ikinci kuşak antipsikotik ilaçların başarılı bir şekilde kullanıldığı bildirilmektedir. Biz bu yazımızda, aripiprazol tedavisi ile tikleri düzelen bir Tourette bozukluğu olgusunu sunmayı amaçladık.

Anahtar kelimeler: Aripiprazol, Tourette bozukluğu, tedavi

ABSTRACT

A case of tourette syndrome: response to aripiprazole treatment

Tourette's disorder is a neuropsychiatric syndrome that manifests with motor and vocal tics. Antipsychotics, especially pimozide and haloperidol have been used in treatment of Tourette's disorder for a long time. In recent studies, it was reported that second generation antipsychotics have been successfully used to treat Tourette's disorder. In this article we present a report of successful treatment of tics with aripiprazole in a patient with Tourette's disorder.

Key words: Aripiprazole, Tourette's disorder, treatment

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INTRODUCTION

Tourette's Disorder (Tourette Syndrome, TS) has a childhood or adulthood onset and is characterized by chronic, intermittently recurring multiple motor and vocal tics (1). Antipsychotic drugs are often used to treat TS. ; haloperidol and pimozide are among the most frequently used (2). With the introduction of second-generation antipsychotic drugs, case reports and studies that illustrate the efficacy of these drugs are being published. These drugs are helpful in addressing motor/vocal tics, attention disorder, obsession, hyperactivity and anxiety symptoms; their relatively positive profiles of adverse effects allow for common use (3). Studies have reported positive results with risperidone, olanzapine and quetiapine in TS treatment (4-6). In Turkey, there are publications on efficacy of various second-generation antipsychotics for TS treatment, as case reports. Bozabalı et al. stated that only limited response was possible for two cases in one of their case reports; in another, they reported that risperidone was mot effective, compared to olanzapine and haloperidol (7,8).

Aripiprazole is a new generation antipsychotic agent with a partial agonistic effect against dopamin D2 receptors and serotonin 5-HT1A receptors, and an antagonistic effect against serotonin 5-HT2A receptors (9). Aripiprazole is emerging into common use throughout the world for treating schizophrenia and bipolar disorder because of its efficacy and favorable adverse effect profile (10). In the limited number of studies related to aripiprazole in TS treatment, most report favorable results. Padala et al. stated that two patients with TS benefited from aripiprazole treatment (11). Davies et al. reported improvement in the symptoms of 10 out of 11 TS patients using 10-20 mg aripiprazole (12). Our objective in this study is to report a long-term TS case who experienced a marked improvement in the condition with aripiprazole treatment.

CASE REPORT

Mrs. A, 26 years old was a high-school graduate, married and working in the textile sector. She presented to the psychiatric outpatient clinic with complaints

of involuntary eye blinking and sounds from the throat, increasing feelings of unhappiness, pessimism, reluctance to do anything, anhedonia, hypersomnia and an increase in appetite. From the age of 10, she had exhibited symptoms like eye blinking, turning her neck, lip curling and vocal tics like clearing her throat. While these symptoms had previously appeared during periods of stress, i.e. anger, excitement and sorrow, they gradually began to occur without any precipitating stress factors. The patient visited the psychiatric outpatient clinic a number of times had been prescribed haloperidol (3 mg/day).Though she experienced some benefit from this, she discontinued the medication due to the adverse effects of the drug. Mrs. A was prescribed 3 mg/day risperidone until up to the last three months; she discontinued the medication due to weight gain, increase in appetite and menstrual irregularity. Within the last one to two months, she complained again of gradually increasing feelings of unhappiness, pessimism, reluctance to do anything, anhedonia and hypersomnia.

Her psychiatric examination revealed that she was cognizant and her orientation was intact. The patient's ability to concentrate and her attention span had decreased though her self-care was consistent with her socio-cultural status. Her speech was spontaneous and low-pitched. Her feelings of hopelessness included grief and anxiety and feelings of depression. She was experiencing a decrease in psychomotor activity and an increase in motor and vocal tics.

The patient was diagnosed with TS and major depression. She was prescribed fluoxamine (100 mg/day) and aripiprazole (10 mg/day) . At the control interview fifteen days later, the patient reported a lessening of her symptoms, particularly hypersomnia, hyperphagia, eye blinking and lip curling. The aripiprazole dose was increased to 15 mg/day in the first month. The patient was followed for 6 months. Her psychiatric clinical evaluation indicated that her depressive symptoms had disappeared completely. When evaluated with regard to TS, the patient reported that her motor tics had also ceased and that that her vocal tics had decreased to an unprecedented extent.

DISCUSSION

In addition to their efficacy, second-generation antipsychotic drugs have demonstrated a low rate of extrapyramidal adverse effects; this plays a role in their growing use. Classical antipsychotic drugs are being phased out in favor of new generation antipsychotic drugs, not only for schizophrenia but also in other indications. Tourette syndrome is one of the new indications for second-generation antipsychotic drugs. There an enormous number of case reports on the use of second-generation antipsychotic drugs in TS treatment, but limited numbers of open and case-controlled studies (4-6,13). Another antipsychotic drug shown to be clinically useful in TS is aripiprazole (11,12,14). TS etiology is not exactly known but the consensus is that many neurotransmitter systems do play a role in TS etiology. As classical antipsychotic drugs provide especially better results, dopaminergic system has long been the focus of similar studies. A consequence of brain imaging and neuropsychological assessment studies is the discovery that TS patients might have a malfunction particularly in the prefrontal dopaminergic region (15). Since aripiprazole is known as a partial agonist, the regulatory effect of the drug on the dopaminergic system may be effective in alleviating the dopaminergic dysfunction observed in TS. Fewer extrapyramidal adverse effects during this treatment are another advantage of using aripiprazole. In our case, this patient with a 16-year history of TS reported that she felt better than ever before. after the aripiprazole course; and she had no extrapyramidal adverse effects during the follow-up period. This case suggests that aripiprazole, a partial dopamine agonist, can be an alternative option in TS treatment, but controlled studies are required in order to for this to be conclusive.

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