

Very Early Onset Bipolar Disorder and Aripiprazole Treatment: A Case Report

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Submitted: 03 Oct 2016; Accepted: 18 Nov 2016; Published: 24 Nov 2016

Abstract

Childhood and adolescence onset bipolar disorder causes serious interpersonal, familial, and academic disturbances. Early onset can seriously effects the quality of life of the patient and his/her family. Lifelong functionality is worse than adult onset. Diagnosis of early onset disorder could take longer time period and there is disagreement about the treatment in literature. Consistent evidence have been found, favouring the use of second-generation antipsychotics like risperidone, aripiprazole and ketiapine for the treatment of early onset bipolar disorder. Aripiprazole is a prototype of dopamine-serotonine system stabilisers and it has a different receptor profile. Because of this receptor profile, side effects and disagreement about treatment is rare. This paper aims to get attention that aripiprazole is usable for early onset bipolar disorder treatment.

Keywords: Antipsychotics, Aripiprazole, Very early onset bipolar disorder.

Introduction

Bipolar disorder affect approximately 1% of adolescents. These cases are 30% of all acute psychiatric inpatient admissions for people under 18 [1]. Increased energy, grandiosity, distractibility, hypersexuality, hyperactivity, irritability, impaired judgement, pressed thought are seen in young manic patients [2]. Manic episodes are often of rapid onset in adults and manifestations are characterized as distinct alterations between the episodes but typically episodes and distinction is less clear in early onset disorder [3].

Evidence supports the use of monotherapy with a second-generation antipsychotic (SGAs) in the first instance [3]. There are randomized placebo-controlled trials of SGAs treatment for bipolar disorder [4,5]. Aripiprazole, is one of the SGAs and most commonly used in the treatment of tic disorder, aggression, autism, schizophrenia, and bipolar disorder. As side effects, it causes mostly akathisia and gastrointestinal irritability, but usually well tolerated [6]. In a study it is determined that in daily doses of 10 mg or 30 mg aripiprazole is an effective and generally well-tolerated acute treatment for pediatric patients with bipolar disorder [7].

In this case report, we discussed the aripiprazole treatment of a 6-years-old male patient with bipolar disorder.

Case Report

When he had consulted with Kocaeli University department of

child and adolescent psychiatry, the case was 6-years-old male and first grade student. He is now 11-years-old and sixth grade student. When he was 6-years-old, it had been deducted that he includes some problems such as; temper tantrums, hyperactivity, attention deficits, fighting with friends and his brother.

He was born in term, by spontaneous vaginal birth as the first healthy and scheduled pregnancy of the mother. The birth weight was normal and there were not any complications after the labor. His motor and mental developmental stages including toilet training was normal.

His mother is 34 years old, a primary school graduate and not working. His father is 34 years old, a primary school graduate and worker. He also has a brother who was 9-years-old. His grandfather had bipolar disorder and has been followed up by Kocaeli University Psychiatry department.

After evaluation of the patient, we learned that he had behavioral problems during few days of every months. During those days, his teacher and parents said that he had changed. He had started to be more irritable and restless, speak much, swear to others, want to spend too much money, masturbate, have grandiosity, want to play with knives and sleep less in those days. We wanted his mother to write those behavioral changes and days to a mood calender. It was noticed that his mood attacks had continued approximately seven days. Those days his handwriting had been also gotten worse. It could come out from his notebooks.

At the first psychiatric examination of the case, he was assessed

as normal looking for his age. He had eye contact, he showed a lack of concentration and attention, his self care was well and his clothes were appropriate for his social-economic situation. His memory and orientation was normal. His mood was hyperthymic. His process of thought was ordinary. His intelligence was seen as border clinically.

Through all evaluations, it was decided that the case used to be followed in our outpatient clinic regularly. The case had the diagnoses of attention deficit and hyperactivity disorder and bipolar disorder. His medical treatment started with 18mg/day OROS methylphenidate. We followed up the bipolar disorder symptoms before adding mood stabiliser or antipsychotic treatment. We added 2mg/day risperidone to methylphenidate. The ADHD symptoms declined but his mood attacks had started to get up to ten days. After a month, risperidone treatment discontinued and valproate 200mg/day had been reciped. With a month of valproate treatment, he had lost weight and got more irritable. The parents had not want to continue the valproate treatment. With only methylphenidate treatment he had developed tachycardia attacks. After pediatric cardiology examination we had learned he had an arrhythmia and it was suggested not to use any psychotropic medication. After our research and consultation with cardiology, we discontinued to recipe methylphenidate, too. The patient got worse. With researching for medication, aripiprazole which was the psychotropic with least cardiologic side effects and had mood stabiliser effect, had been chosen for pharmacotherapy and the aripiprazole dose gradually increased to 10mg/day. Psychoeducation had given to family about aripiprazole and bipolar disorder. The case had cardiologic examination regularly but he had not suffer any cardiac problem. The case had been followed 5 years regularly in our clinic. He and his parents had not described any problem at home and school about the bipolar disorder on aripiprazole treatment.

Discussion

In child and adolescent patients with bipolar disorder, monotherapy with SGAs have been found effective. Literature do not support the use of mood stabiliser monotherapy and also data is limited for combination therapies [3]. Aripiprazole is a SGA which considered as a partial dopaminergic agonist, acting on both postsynaptic dopamine 2 receptors and presynaptic autoreceptors with partial agonism on serotonin 2A receptors. Because of these mechanism aripiprazole has mood stabiliser effect [8]. There are lots of study in literature about aripiprazole treatment efficacy in child and adolescent bipolar disorder [9-11].

In child and adolescent psychiatry practice, generally it is important to recipe monotherapy in all kind of illnesses. Because children are sensitive for side effects. Fragus et al. found increasing body mass index after the treatment with olanzapine and risperidone; conversely increasing in triglyceride and prolactine levels, weight gain and cardiac problems are nonsignificant with aripiprazole treatment. In this study dystonia, tremor and akathisia were mildly elevated with aripiprazole treatment compared with patients who received placebo but there was no statistical significance [4].

In our case we used aripiprazole monotherapy for a child patient with bipolar disorder and he had no side effect, consentient with the literature. This issue wants to get attention that this psychopharmacologic agent is usable for early onset bipolar disorder's longer time treatment.

References

1. Pfeifer JC, Kowatch RA, Del Bello MP (2010) Pharmacotherapy of bipolar disorder in children and adolescent: recent progress. *CNS Drugs* 24: 575-593.
2. Geller B, Luby J (1997) Child and adolescent bipolar disorder: a review of the past ten years. *J Am Acad Child Adolesc Psychiatry* 36: 1168-1176.
3. Hazell P, Jairam R (2012) Acute treatment of mania in children and adolescents. *Current Opinion* 25: 264-270.
4. Fraguas D, Correll CU, Merchán-Naranjo J, Rapado-Castro M, Parellada M, et al. (2011) Efficacy and safety of second generation antipsychotics in children and adolescent with psychotic and bipolar spectrum disorders: comprehensive review of prospective head-to-head and placebo-controlled comparisons. *Eur Neuropsychopharmacol* 21: 621-645.
5. Zuddas A, Zanni R, Usala T (2011) Second generation antipsychotics in children and adolescents: a review of the randomized controlled studies. *Eur Neuropsychopharmacol* 21: 600-620.
6. Doğangün B, Karaçetin G, Kayaalp L (2008) Çocuk ve ergenlerde aripiprazol kullanımı ile ilgili bir gözden geçirme. *Çocuk ve Gençlik Ruh Sağlığı Dergisi* 15: 163-175.
7. Findling RL, Nyilas M, Forbes RA, McQuade RD, Na Jin MS, et al. (2009) Acute treatment of pediatric bipolar I disorder, manic or mixed episode, with aripiprazole: a randomized, double-blind, placebo-controlled study. *The Journal of Clinical Psychiatry* 70: 1441-1451.
8. Durkin JP (2004) Aripiprazole in the treatment of bipolar disorder in children and adolescents. *J Child Adolesc Psychopharmacol* 14: 505-506.
9. Barzman DH, Del Bello MP, Kowatch RA, Gernert B, Fleck DE, et al. (2004) The effectiveness and tolerability of aripiprazole for pediatric bipolar disorder: a retrospective chart review. *J Child Adolesc Psychopharmacol* 14: 593-600.
10. Biederman J, McDonnell MA, Wozniak J (2005) Aripiprazole in treatment of pediatric bipolar disorder: a systematic chart review. *CNS Spectr* 10: 141-148.
11. Mech A (2005) Assessing benefits of aripiprazole in depressed and bipolar children and adolescents: a naturalistic retrospective chart review study. *Eur Neuropsychopharmacol* 15: 364-365.

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