Key Words: obsessive compulsive disorder, ziprasidone, augmentation

Ziprasidone Augmentation in an Adolescent with Obsessive Compulsive Disorder: A Case Report

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ABSTRACT *~ Obsessive compulsive disorder (OCD) is characterized by recurrent, unwanted thoughts (obsessions) and/or repetitive behaviors (compulsions). Although selective serotonin reuptake inhibitors are widely used to treat OCD, only half of the patients respond well. Several potentiation strategies including off-label use of antipsychotics (mostly risperidone, quetiapine) have been tried. Ziprasidone is an atypical antipsychotic with the best affinity ratio of 5 $HT_{2A/D2}$ and $5HT_{2C/D2}$ receptors. There is a limited data on ziprasidone in pediatric groups. The case described in the following is an example for the augmentation with ziprasidone to treatment refractory OCD.* Psychopharmacology Bulletin. *2016;46(1):73–76.*

Introduction

Obsessive compulsive disorder (OCD) is a chronic anxiety disorder and is characterized by recurrent, unwanted thoughts (obsessions) and/or repetitive behaviors (compulsions). Abnormal neurotransmitter functioning of serotonin, dopamine and glutamate have roles in the pathogenesis.[1] Psychotherapy and pharmacotherapy are both used for the treatment. There is evidence that almost half of the patients with OCD do not improve in spite of the treatment. First line of pharmacotherapy involves selective serotonin reuptake inhibitors (SSRI).[1] If a clinican encounters a treatment resistance, additional psychotropics are tried. Several augmentation strategies including off-label use of antipsychotics (mostly risperidone, quetiapine) have been studied. In some cases, antiobsessive effect is obtained in low doses, while high doses may cause exacerbations of the obsessive compulsive symptoms. The advantage of 5- HT selectivity in the treatment of OCD has been demonstrated in comparative trials.[2,3]

The case described in the following concerns a pediatric aged patient with OCD resistant to different treatment regimes and responded positively to combination of ziprasidone and paroxetine.

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Case History

The case is now a 14-year-old girl with DSM-IV diagnosis of OCD. She did not have any other medical disorders and her family history was negative for mental disorders. Her IQ level was normal but her grades were quite low due to her counting compulsions at school. She was suffering from severe perfectionism and symmetry obsessions and compulsions such as controlling, counting and ordering objects. She couldnot write or read until she checked and rearranged her books and notebooks which led her delay in class and home. She couldnot sleep well because she used to get up for controlling all doors and windows, her homework, her school bag and she put straight her bedliners every night at least 2 hours. With these complaints she admitted to adolescent psychiatry outpatient clinic one year ago. She had 27 scores from Children's Yale Brown Obsessive Compulsive scale (CY-BOCS).

Symptomatology

The case is now a 14-year-old female with normal developmental milestones, normal IQ, presented with symptoms of choking phobia, checking doors and windows and orderliness when she was 11 years old.

Diagnosis

She was diagnosed with OCD plus attention deficit hyperactivity disorder (ADHD) (inattentive type) by DSM-IV based semi structured diagnostic tool (K-SADS).[4] Additional to appropriate methylphenidate treatment for ADHD treatment, a cognitive behavioral threrapy for OCD was planned. However she didnot attend the scheduled CBT programme regularly, pharmacotherapy was administered as well.

Treatment

First sertraline (up to 100 mg/day) for 2 months and then fluoxetine (up to 40 mg/day) for 3 months were administered seperately. She showed only minimal improvement on the Clinical Global Impression (CGI)-improvement scale for OCD. But her ADHD symptoms responded well to methlyphenidte. She was considered as having a resistant OCD and paroxetine 10 mg/day was started and the dose increased to 30 mg/day in two months. Risperidone was added as an augmentation and the dose increased from 0.5 to 1.5 mg/day. Her symptoms were revealed %50, but after 10 weeks of risperidone use unfortunately she gained 6 kilograms on. Her family was informed about the offlabel use

of antipsychotics and an informed consent was obtained from herself and her parents. After 2 weeks washout, ziprasidone 20 mg (initial dose) was added to potentiate the SSRI instead of risperidone. The final dose of ziprasidone was 60 mg/day (40 mg in the morning, 20 mg at night). At the 16th week, her obsessions were markedly decreased, she reached the CGI-I "very much improved" level, so ziprasidone dose was tapered and stopped. She had lost 3 kg with no serious adverse effects except mild headache. No changes in ECG and routine laboratory investigations were noticed. Her final score from CY-BCOS was 10. She is now on paroxetine and methylphenidate treatment and successfull at school.

Discussion

Unresponsive OCD cases further predict comorbidities and ongoing adulthood psychiatric disorders and they have poor quality of lives and problematic academic and social lives. Therefore proper intervention of such cases is important. Patients with comorbid tic disorders are often resistant to conventional OCD treatment and they mosty benefit from antisychotic augmentation.[2]

Taking in the consideration the fact that treatment of OCD is complicated, the studies of antipsychotics with both serotonergic and dopaminergic effects are promising. Mostly risperidone and aripiprazole are prefferred for treatment enhancers.[2,3] Here we presented a case who responded and tolerated well to ziprasidone. Garcia et al. reported an adult case with OCD who had clinical improvement with only 4 week use of ziprasidone.[5] Ziprasidone is an atypical antipsychotic with specific properties other than the atypical atipsychotics including higher affinity ratios fort he receptors 5 HT 2A/D2 and 5HT 2C/D2. It has also 5HT1A and 5HT1D antianxiety effects. A recent study by Yeghian et al. showed that ziprasidone is effective in adolescents with OCD and comorbid tic disorders. In their clinical open label study, they reported that ziprasidone was ineffective in low doses as 20–40 mg, but more effective in higher doses like 60–80 mg.[6] In our case, we used totally 60 mg/day ziprasidone in divided doses. We can assume that ziprasidone may be a choice for augmentation in the treatment of OCD in adolescents. Unlike risperidone, ziprasidone with less blockage to 5 HT2C and H1 receptors has an advantage of less effect on weight gain. Further controlled ziprasidone studies for the treatment of OCD in children and adolescents are needed. ✤

Conflict of Interest

None

References

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