Case Report

Ziprasidone in Treatment of Resistant Obsessive-Compulsive Disorder in a Female Adolescent

A Vahdani[1]*, R Haghighat[2], A Mani[3]

[1]Department of Psychiatry, Iranian Hospital, Dubai, UAE, [2]College of Education and Psychology, Shiraz University, [3]Cognitive Neuroscience, Shiraz University of Medical Sciences, Shiraz, Iran

Abstract

While serotonin reuptake inhibitors (SSRIs) and behavioral therapy are the first-line agents in treatment of obsessive-compulsive disorder (OCD), 40-60% of patients with the disorder do not respond to therapy. So other neurotransmitters may play a role in OCD. In this regard, there has been particular interest in the dopaminergic system, with various antipsychotic drugs having been used as adjunctive therapy for refractory OCD. This study describes the efficacy of ziprasidone as adjuncts for treatment-resistant OCD in a young female adolescent.

Keywords: Ziprasidone; Obsessive-compulsive disorder, Female; Adolescent

Introduction

Obsessive compulsive disorder (OCD) is characterized by intrusive, troubling thoughts that are perceived as the product of one's own mind as distinguished from thought insertion in patients with schizophrenia and/or repetitive, compulsive behaviors or mental rituals.[1] The disorder has a prevalence of 2% in many different countries and has been remarkably consistent over time and place.[1] Obsessions are defined as persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate and that cause marked anxiety or distress.[1] Compulsions are defined as repetitive behaviors or mental acts to prevent or reduce the anxiety or distress and not to provide any pleasure or gratification.[1] Associated features of OCD includes avoiding situations related to the obsession, hypochondriacal worries, guilt, a strong sense of responsibility for the symptoms, and sleep difficulties.[1] Compulsion performance results in serious marital, occupational, and/or social disability.[1]

Among the psychopharmacological treatment measures, efficacy of the selective serotonin re-uptake inhibitors (SSRI) supports the role of serotoninergic system in treatment of the disorder.[2] However, adequate treatment regimens with these drugs only provide significant improvement in 50% of the patients.[3] Association of SSRI plus antipsychotics have also been used with positive results; at first, classical antipsychotics and more recently atypical antipsychotics such as clozapine, risperidone, olanzapine or quetiapine. In some cases, the anti-obsessive effect is obtained with low doses, while high doses may cause exacerbations of obsessive-compulsive symptoms.[4] OCD affects 0.5–2% of young people while many of them may be resistant to conventional therapies.[1]

Many studies recommended cognitive behavioral therapy (CBT), either alone or in conjunction with a SSRI, as a frontline treatment for adolescents with OCD.[5,6] However, even with the more well designed studies and strict inclusion/exclusion criteria, response rates can be as low as 21% for an SSRI.[7] Remission rates are better with CBT-based approaches, with response rates ranging from 40% to 85%.[5]

Early studies of antipsychotic monotherapy do not meet today's clinical trial standards and these agents are not recognized as treatments for OCD. One placebo-controlled trial of chlorpromazine in 75 ill-defined cases failed to show a specific effect on obsessive-compulsive symptoms.[9] Several subsequent positive case reports showed anti-obsession effects of monotherapy with a variety of antipsychotics,[8-12] but these were mainly in schizophrenic patients.

***Correspondence:** Ali Vahdani, MD, Department of Psychiatry, Iranian Hospital, Dubai, UAE. Tel: +971-4-3440321, Fax: +97-4-3440322, e-mail: bavahdani@yahoo.com
Received: February 10, 2009 Accepted: July 5, 2009

This is a report of an 11 years old girl with obsessive-compulsive disorder referredto our clinic due to contamination obsession and compulsive washing. Her parents gave an oral consent for publication of this report.

Case Report

The patient was an 11 years old female who referred to our psychiatric clinic affiliated to Iranian Hospital in Dubai, UAE with severe contamination obsession and compulsive washing. Her symptoms started since 6 months from her first referral. The symptoms were first mild until one month ago and they got seriously more severe later. The patient usually stayed in bathroom 3-4 times a day for 2-3 hours cleaning herself, while always felt that she was not still clean. She suffered from anxiety, irritability, and dysphoric mood; thinking of uncleanliness and contamination. Her functions were seriously deteriorated and was absent from school for several days and her school grades were weak. The patient insight and judgment was normal and she knew that her obsession about cleanliness was un-necessary but she could not control her intrusive obsessive thoughts.

With the diagnosis of obsessive compulsive disorder, her treatment was started with flouxetine (20 mg for time). In the second week, treatment was stopped due to gastro-intestinal side effects and intolerance of flouxetine, so treatment with fluvoxamine was started. Within 2 weeks, fluvoxamine dose increased to 150 mg/day and after 4 weeks, consumption of the same dose resulted into a decrease in the obsessive thoughts and compulsions and after 6 weeks, the patient and her family were satisfied with the therapy. The patient had still some obsessive thoughts but she could control them effectively. Meanwhile her behavioral therapy was continued. After 8 weeks of therapy with fluvoxamine, the patient experienced insomnia, irritability, hypertalkativeness, anxiety, agitation, hyperactivity, an increase in sex desire and even doing masturbation for the first time, dating with a boy without any permission from her parents while they were religious and had not experienced the event in their family before. The patient mood at this phase was euphoric.

With provisional diagnosis of anti-depressant induced mood disorder, fluvoxamine was tapered gradually within 2 weeks and after termination of therapy, the symptoms became worse with the diagnosis of bipolar mood disorder/single manic episode/severe without any psychotic feature. So treatment with lithium was started for the patient. Within 2 weeks, lithium serum level reached to 1.1 mEq/L and during 3 weeks, the symptoms improved. Irritability, euphoric mood, insomnia and hypersexuality decreased, but meanwhile obsessive symptoms were still present. After 6 weeks, the patient and her family asked to stop the therapy with lithium due to a problem in lithium plasma test and fears of the toxicity. So lithium was switched to sodium valproate (1000 mg/day) and after six weeks, the patient's mood became stable and her manic episode was in full remission but there were still obsessive symptoms which continuously increased and again the patient's functions were impaired. So clomipiramine (50 mg/day) was started and after 4 weeks, there was some improvement in obsessive symptoms even the patient showed some episodes of irritability and insomnia and aggressive behaviors too. The patient was worried about her weight gain when starting valproate. She suffered from hair loss and wished to change her medicines, while still had her obsessive symptoms.

In her treatment course, both sodium valproate and clomipiramine were tapered off and ziprasidone (20 mg/bid) was started and after one week, it was increased to 40 mg/day. After 4 weeks, the patient and her family reported great improvement in obsessive thoughts and compulsive behaviors while the patient's mood was normal and the behavioral status returned to a normal state. After 6 weeks, the patient had her normal functions and attended her school regularly. After six months, when continuing the same dose of ziprasidone, the patient and her family were totally satisfied with the stability and returning to a normal life and function. All her work ups including liver, kidney and thyroid function tests, ECG, eyes exams and her general health condition were performed at the beginning of the treatment measure, before starting the lithium and ziprasidone and after 6 months of therapy with ziprasidone, they were in normal level. After 3 months of treatment with ziprasidone, the patient who had a 10% weight loss could return to her previous weight and the body mass index within the normal limit.

Discussion

It is accepted that SSIRs and behavioral therapy (Flooding and relaxation) are the first line of treat-

ment of OCD, and someone who receives both pharmacotherapy and psychotherapy would be more resistant to a relapse. So when encountering with such a case who had no previous history of psychiatric problem in her life and also in her family, empirical therapy with flouxetine and psychotherapy may have some side effects. So in our case, the drug was changed to fluvoxamine. The patient showed some improvement in her sign of OCD but after 8 weeks, she noticed some hypomania which was managed by lithium and valproate. After this therapeutic modality, the obsessive symptoms increased and her functions were impaired, so ziprasidone was administered with an acceptable result.

We can conclude that just one transmitter may not be involved in the course of OCD. In some cases especially for those who have other symptoms beside the obsession, the therapy should consider other neurotransmitters too and when a case is resistant to monotherapy, the combination therapy may be recommended.

Conflict of interest: None declared.

References

1 American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-IV-TR (4th text revision ed.), 2000; Washington, DC: APA.

2 Goodman WK, Price LH, Rasmussen SA, Delgado PL, Heninger GR, Charney DS. Efficacy of fluvoxamine in obsessive-compulsive disorder. A double-blind comparison with placebo. *Arch Gen Psychiatry* 1989; **46**:36-44. [2491940]

3 McDougle CJ, Epperson CN, Pelton GH, Wasylink S, Price LH. A double-blind, placebo-controlled study of risperidone addition in serotonin reuptake inhibitor-refractory obsessive-compulsive disorder. *Arch Gen Psychiatry* 2000;**57**:794-801. [10920469] [doi:10.1001/archpsyc.57.8.794]

4 McDougle CJ. Update on pharmacologic management of OCD: agents and augmentation. *J Clin Psychiatry* 1997;**58**:11-7. [9393391]

5 Barrett PM, Farrell L, Pina AA, Peris TS, Piacentini J. Evidence-based psychosocial treatments for child and adolescent obsessive-compulsive disorder. *J Clin Child Adolesc Psychol* 2008;**37**:131-55. [18444056] [doi:10.1080/15374410701817956]

6 Watson HJ, Rees CS. Meta-analysis of randomized, controlled treatment trials for pediatric obsessive-compulsive disorder. *J Child Psychol Psychiatry* 2008;**49**:489-98. [18400058] [doi:10.1111/j.1469-7610.2007.01875.x]

7 Pediatric OCD Treatment Study (POTS) Team. Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. *JAMA* 2004;**292**:1969-76. [15507582] [doi:10.1001/jama.292.16.1969]

8 Trethowan WH, Scott PA. Chlorpromazine in obsessive-compulsive and allied disorders. *Lancet* 1955; **268**:781-5. [14368870] [doi:10.1016/S0140-6736(55)90483-9]

9 Altschuler M. Massive doses of trifluoperazine in the treatment of compulsive rituals. *Am J Psychiatry* 1962;**119**:367-8. [13860781]

10 Hussain MZ, Ahad A. Treatment of obsessive-compulsive neurosis. *Can Med Assoc J* 1970;**103**:648 passim. [5455288]

11 Rivers-Bulkeley N, Hollender MH. Successful treatment of obsessive-compulsive disorder with loxapine. *Am J Psychiatry* 1982;**139**:1345-6. [7124992]

12 O'Regan JB. Treatment of obsessive-compulsive neurosis. *Can Med Assoc J* 1970;**103**:650-1. [5271810]