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Case Report

Supra-Therapeutic Selective Serotonin Reuptake Inhibitor (Ssri) Dosesfor Refractory Obsessive-Compulsive Disorder: A Case Report

Syed Faraz Zafar, Michelle Ahmed*

Lahore Medical and Dental College/GTTH Lahore Pakistan, *Portsmouth Hospitals University United Kingdom

ABSTRACT

Obsessive-compulsive disorder (OCD) is a chronic mental health condition that is associated with relatively high rates of non-response to standard first-line treatments. We report a case of treatment-refractory OCD that was successfully treated with the pharmacological strategy of using selective serotonin reuptake inhibitors (SSRIs) in the above-licensed doses. Patient, a 26-year-old male, had failed to respond to multiple trials of SSRIs inside the licensed dose range and augmentation with antipsychotic medication when he was started on high-dose escitalopram(40mg/day). His clinical condition improved greatly after 12 weeks on this regimen, as demonstrated by a significant decrease in the Yale-Brown Obsessive Compulsive Scale (from 33 to 12). This case provides additional support to a small body of evidence that suggests the utility of using higher doses of selective serotonin reuptake inhibitors (SSRIs) in treatment-resistant obsessive-compulsive disorder (OCD).

Keywords: Obsessive-compulsive disorder (OCD), Treatment-resistant, Refractory, Selective serotonin reuptake inhibitor (SSRI), high dose.

How to Cite This Article: *Zafar SF, Ahmed M. Supra-Therapeutic Selective Serotonin Reuptake Inhibitor (Ssri) Dosesfor Refractory Obsessive-Compulsive Disorder: A Case Report. Pak Armed Forces Med J 2024; 74(2):591-593 DOI: https://doi.org/10.51253/pafmj.v74i2.6881*

INTRODUCTION

About 40 to 60% of patients who have obsessive-compulsive disorder (OCD) do not respond well to first-line treatment with two or more serotonin reuptake inhibitors (SSRIs, SNRIs and Clomipramine) or cognitive behavioural therapy.[1] Most guidelines recommend using atypical antipsychotic augmentation as the next practical step.[2] More than half of the patients who undergo a trial with atypical antipsychotics remain symptomatic, and many of those who do respond to them are left with a serious side effect burden.[3] Remaining options for individuals who are refractory to the above measures include glutamatergic agents, opioids, stimulants and even psychedelics.[4]

However, a small body of research points out a potential strategy that could be tried in individuals not responding to SRIs in usual doses. This strategy involves potentiating serotonergic signalling in the brain by going beyond the usual doses of SSRI medication.

CASE DESCRIPTION

A 26-year-old man consulted the outpatient clinic with a history of severe obsessive-compulsive symptoms. He described the onset of OCD at 18 years of age, followed by persistent and unremitting symptoms. The illness started with obsessions around religious blasphemous themes and cleanliness with compulsive washing of his body and clothes. Later, with time, he also developed intrusive fears about the risk of harm to himself as well as his family. There was no history of physical illness or substance use. Routine general physical examination, as well as laboratory tests, were all within normal limits.

He had been getting outpatient treatment with various psychiatric clinics in the past five years and had undergone unsuccessful trials with several pharmacological agents. These included fluoxetine (up to 60 mg/day), Fluvoxamine (up to 200 mg/day) and Clomipramine (up to 225 mg/day), each given for > 08 weeks as well as adjunctive Risperidone (3mg/day), Olanzapine (10mg/day) and CBT (10 sessions) without any meaningful improvement. His last therapeutic trial was with Escitalopram 20mg, which he had been taking for ten weeks. OCD symptom severity determined by the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) was 33.

After a comprehensive assessment, informed consent was sought from the patient about the off-label nature of the trial. We decided to continue with the Escitalopram and increase the dosage to 30mg/day. Review after two weeks showed only a marginal difference, with Y-BOCS dropping 2 points to 32. His dose was increased to 40mg, and remarkable

Correspondence: Dr Syed Faraz Zafar, Lahore Medical and Dental College/GTTH Lahore Pakistan
Received: 11 Jun 2021, revision received: 25 Oct 2023; accepted: 26 Oct 2023

improvement followed at the 8th week, 12th week and 16th-week follow-ups with Y-BOCS score dropping to 24,16 and then 12, respectively (Figure).

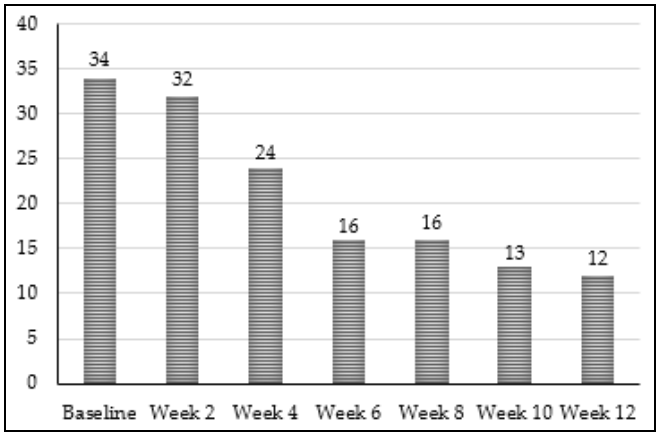

Figure: Changes in Yale–Brown Obsessive–Compulsive Scale Scores across Time

The distress associated with the obsessions, as well as the time spent in compulsions, decreased drastically, and the patient reported that ''for the first time in last eight years, he felt like his pre-morbid self again''.

Side effects encountered were akathisia and tremors, which were both controlled with adjunctive Propranolol (40mg/day). His libido, though, remained low despite recovery.

DISCUSSION

There are more than three decades worth of evidence linking serotonergic aetiology with obsessive-compulsive disorder.[5] Doses of SSRIs generally used are higher than those employed in the treatment of depressive disorders, and this is backed by clinical evidence showing higher doses of serotonergic medication are associated with better response rates than moderate or lower doses.[6] Most validated guidelines now recommend quickly titrating up to the maximum tolerated dosage once an SRI medication is started.[7]

When used in higher than usual doses, the response rates reported exceed 50%, with clinically meaningful improvement apparent in most patients. Individual medications and maximum daily dosages reported are Fluoxetine 100mg, Escitalopram 50mg, Sertraline 400mg and Paroxetine 80mg.[8]

Most published literature reports an increased prevalence of side effects compared to usual doses, although the dropout frequency did not increase.[9] The most consideration has to be paid to the risk of serotonin syndrome. Although it is a rare outcome, and published literature reports no occurrences in patients given these higher doses, it is still possible. Our patient was counselled about possible warning signs and the need to contact our facility immediately if he noticed any of them.

Conflict of Interest: None.

Authors' Contribution

Following authors have made substantial contributions to the manuscript as under:

SFZ & MA: Conception, data acquisition, data interpretation, drafting the manuscript, critical review, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

REFERENCES

1. Stein DJ, Koen N, Fineberg N, Fontenelle LF, Matsunaga H, Osser D, et al. A 2012 evidence-based algorithm for the pharmacotherapy for obsessive-compulsive disorder. Curr Psychiatry Rep 2012 ; 14(3): 211-219. https://doi.org/10.1007/s11920-012-0268-9
2. Albert U, Marazziti D, Di Salvo G, Solia F, Rosso G, Maina G. A Systematic Review of Evidence-based Treatment Strategies for Obsessive- compulsive Disorder Resistant to first-line Pharmacotherapy. Curr Med Chem 2018; 25(41): 5647-5661. https://doi.org/10.2174/0929867325666171222163645
3. Dold M, Aigner M, Lanzenberger R, Kasper S. Antipsychotic augmentation of serotonin reuptake inhibitors in treatment-resistant obsessive-compulsive disorder: a meta-analysis of double-blind, randomized, placebo-controlled trials. Int J Neuropsychopharmacol 2013 ; 16(3): 557-574. https://doi.org/10.1017/S1461145712000740
4. Fineberg NA, Hollander E, Pallanti S, Walitza S, Grünblatt E, Dell'Osso BM, et al. Clinical advances in obsessive-compulsive disorder: a position statement by the International College of Obsessive-Compulsive Spectrum Disorders. Int Clin Psychopharmacol 2020 ; 35(4): 173-193. https://doi.org/10.1097/YIC.0000000000000314
5. Sinopoli VM, Burton CL, Kronenberg S, Arnold PD. A review of the role of serotonin system genes in obsessive-compulsive disorder. Neurosci Biobehav Rev 2017 ; 80: 372-381. https://doi.org/10.1016/j.neubiorev.2017.05.029
6. Bloch MH, McGuire J, Landeros-Weisenberger A, Leckman JF, Pittenger C. Meta-analysis of the dose-response relationship of SSRI in obsessive-compulsive disorder. Mol Psychiatry 2010 ; 15(8): 850-855. https://doi.org/10.1038/mp.2009.50
7. Koran LM, Hanna GL, Hollander E, Nestadt G, Simpson HB; American Psychiatric Association. Practice guideline for the

treatment of patients with obsessive-compulsive disorder. Am J Psychiatry 2007 ;164(7 Suppl):5-53.

8. Pampaloni I, Sivakumaran T, Hawley CJ, Al Allaq A, Farrow J, Nelson S, et al. High-dose selective serotonin reuptake inhibitors in OCD: a systematic retrospective case notes survey. J Psychopharmacol 2010; 24(10): 1439-1445. https://doi.org/10.1177/0269881109104850
9. Kayser RR. Pharmacotherapy for Treatment-Resistant Obsessive-Compulsive Disorder. J Clin Psychiatry 2020 ; 81(5): 19ac13182. https://doi.org/10.4088/JCP.19ac13182

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