

Escitalopram in Preschool-Age Children Diagnosed with Obsessive Compulsive Disorder: A Case Report

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When a literature review on pediatric obsessive-compulsive disorder (OCD) is performed, it is observed that there is a dearth of research on preschool period OCD cases. Although cognitive behavioral therapy is recommended as the first line of treatment in preschool OCD cases when patients do not show adequate response to CBT, psychopharmacological treatment offers an alternative. The first line used in psychopharmacological treatment is selective serotonin reuptake inhibitors (SSRI's). However, no SSRI's (or any other drug group) have been approved by the FDA for this age group. Moreover, studies related to psychopharmacology in preschool OCD are very limited in the literature, consisting mostly of case reports related to sertraline and fluoxetine. In those studies, it is reported that sertraline and fluoxetine are effective in preschool OCD and generally well-tolerated. In this paper, we discussed the treatment and six-month follow-up period of a 3.5 year-old (42 months) female diagnosed with OCD and for whom escitalopram was used. In the literature, there is a retrospective case series related to this subject consisting of eleven cases, where improvement in symptoms is reported with escitalopram treatment in the five of six cases diagnosed with OCD. As far as we could find in literature, our paper is the second report on this subject. Our case also included the youngest patient to receive escitalopram for preschool period OCD and report its benefits.

Key words: *Preschool Child, Obsessive-Compulsive Disorder, Escitalopram*

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Obsessive compulsive disorder (OCD) is a common, chronic, and treatment-resistant neuropsychiatric disorder that frequently begins during childhood and adolescence (1, 2). Although attention has been focused on the developmental process of OCD, there are few cases in the literature that discuss OCD in preschoolers (3). Cognitive-behavioral therapy (CBT) is recommended as the first line of treatment in preschool OCD. Psychopharmacological treatment becomes an option when CBT fails to provide adequate effect. Selective serotonin reuptake inhibitor (SSRI's) is the first choice in psychopharmacological treatment (3). Research on psychopharmacological treatment in preschool OCD is limited in the literature. In this paper, we discussed the six-month follow-up period of a 3.5 year-old (42 months) female diagnosed with OCD, for whom escitalopram was used.

Case Report

The patient referred to our clinic because she thought she was sick when she was touched and frequent hand-washing. We learned that her symptoms began three months earlier and no other psychiatric application had been made. She would not let anyone, including her parents, to touch her and if touched inadvertently, she

reacted with crying. Thinking that her toys would get dirty, she avoided playing with them or sharing them with others. Evaluation of her neuro-motor development was normal, and there were no features in the patient and in her family history. Physical and neurological examinations were normal. Her laboratory checkup (complete blood count, liver/kidney function tests, antistreptolysin-O titer, serum C-reactive protein) did not show any abnormal results. The patient was diagnosed with OCD according to DSM-5 criteria. Symptoms of OCD were assessed by the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) (4). Although this scale has no validity or reliability in the Turkish population, it is frequently used in Turkey (5-8). Although this scale was not designed for preschool-age children, we know of no other specific method to assess preschool OCD symptoms. Symptom severity and improvement in clinical follow-up were assessed by Severity (S) and Improvement (I) Clinical Global Impression Scale (CGI-S, CGI-I). Functionality state was assessed by Global Assessment Scale (GAS). The patient's symptoms created distress throughout the day and caused significant disturbance in functionality for both herself and her family. Non-pharmacological therapy was planned originally. However, because of her young age, the patient could

not comply with this program, which included psychoeducation and CBT. Therefore, 5 mg/day fluoxetine was initiated. On the second day of the treatment, she referred to our clinic urgently because of a diffuse rash on her body. After a detailed examination, it was determined that the rashes were related to fluoxetine. Fluoxetine was discontinued and the rashes completely disappeared within the following two days. Due to her young age, the patient was unable to use drugs unless they were in a liquid form. Therefore, escitalopram was initiated at 5 drops/day (2.5 mg/day). At her evaluation upon beginning the escitalopram treatment, CY-BOCS score was assessed as 34, CGI-S was assessed as 5 (markedly ill) and GAS was assessed as 41-50. At the control examination, two weeks following the initiation of the treatment, no side effects were observed and the daily dose was increased to 10 drops/day (5 mg/day). During the examination at the eighth week of the treatment, marked improvement was observed in OCD symptoms. After a five-month follow-up, escitalopram was decreased to 2.5 mg/day. At the examination a month after dose reduction, it was observed that her state of wellbeing was sustained (GAS was assessed as 91-100). No drug-related side-effects were observed during the treatment period. Case is continuing to be followed-up in our clinic. Clinical assessment scale points are given in Table 1.

Discussion

In this paper, a 3.5 year-old female diagnosed with OCD was treated using escitalopram, and her clinical follow-up was discussed. In our study, the patient could not comply with CBT and therapy could not be sustained due to her young age. While treating preschool children with psychopharmacological treatment is a valid option, it should only be pursued if the symptoms are severe enough to cause significant distress or impair the child's relationships or daily routine (3). Because the OCD symptoms of our patient impaired functionality in both herself and her family, and caused significant distress in the child's daily life, it was decided to initiate pharmacological treatment. Geller et al. reported that SSRI's are more effective than placebo in the treatment of pediatric OCD (9). FDA-approved SSRI's for the treatment of children and adolescents OCD are sertraline (for 6 year olds and older), fluoxetine (for 7 year olds and older), and fluvoxamine (for 8 year olds and older). SSRI was not approved by the FDA for use in preschool cases and research on this subject in the literature was very limited. As far as we could detect, there have been no randomized-controlled trials on this subject. Among the limited number of case reports in the literature, fluoxetine and sertraline were reported as generally well-tolerated and effective (5-8). There was only one report using escitalopram. In that case series, eleven preschool patients with anxiety disorder were investigated retrospectively. They did not respond to

psychosocial interventions and escitalopram was used in the treatment; five of the six patients who were diagnosed with OCD showed anywhere from mild to very much improvements due to the treatment. Ages of the patients ranged between 47-64 months old, and the dosage range was 1-10 mg/day (7).

It was recommended to start drug treatment in preschool cases using doses as low as possible and then increase the dose as required in a controlled manner with caution, and follow up carefully for side effects. Since the drugs are in a liquid form, gradually increasing the dosage level from low starting doses is easily accomplished (3). In Turkey, apart from fluoxetine, the only other SSRI's molecule present in liquid formulation is escitalopram. Therefore, we decided to initiate escitalopram treatment for the patient. Escitalopram was started at 2.5 mg/day dosage, and was increased to 5 mg/day two weeks later.

In a study carried out by Coskun et al., there was no response to escitalopram treatment in one of the six OCD cases. In that case, drug-related behavioral disinhibition developed in the second week of the treatment, so treatment was discontinued. At least one side effect related to escitalopram was observed in 81.81% (n = 9) of the 11 cases included in the study. Symptoms of behavioral disinhibition were reported as the most frequently observed side effects (n = 5, 45.45%). No side effects were observed in 18.8% (n = 2) of the cases (7). Symptoms of behavioral disinhibition have also been frequently observed in other case reports in the literature with respect to the psychopharmacological treatment of preschool OCD (5, 6 and 8). In another study, SSRI tolerances of 39 patients under seven years of age were investigated; and it was reported that six of the patients could not continue on SSRI treatment due to behavioral activation (10). In contrast to the results of those studies, there were no side effects in our case that could be related to escitalopram use.

It is reported in the literature that early-onset OCD is associated with worse prognosis (11). Therefore, effectively treating the disorder at an early stage is critical. To the best of our knowledge, our case is the second report in the literature on this subject. Additionally, it is observed that our case is the youngest preschool OCD case who was treated with escitalopram and had benefited it from treatment. Our findings are important with regards to drawing attention to lack of research on this subject. The results of this case report indicate that there should be further randomized, controlled studies with larger sample sizes on the treatment of early-onset OCD patients.

Conflict of interest

None.

Table 1: Clinical Rating Scale Scores at 4 Week Intervals

	CY-BOCS	CGI-S	CGI-I	Stage of Response*
I. Rating (Baseline)	34	5	-	-
II. Rating	29	5	4	V
III. Rating	24	4	3	IV
IV. Rating	17	2	2	III
V. Rating	13	2	2	II
VI. Rating	8	2	1	II
VII. Rating (Endpoint)	3	1	1	I

CY-BOCS: Childrens' Yale-Brown Obsessive Compulsive Scale CGI-S: Clinical Global Impression Scale-Severity
CGI-I: Clinical Global Impression Scale-Improvement

* Pallanti and Quercioli (2006) (12); V: Non-Response, decrease in YBOCS scores is less than 25% and CGI-4
IV: Partial Response, decrease in YBOCS scores is greater than 25% and less than 35% III: Full Response,
decrease in YBOCS scores is greater than 35% and CGI-S 1 or 2 II: Remission, YBOCS score <16 I: Recovery,
YBOCS score <8

References

- Jenike MA. Clinical practice. Obsessive-compulsive disorder. *N Engl J Med* 2004; 35: 259-265.
- Heyman I, Mataix-Cols D, Fineberg NA. Obsessive-compulsive disorder. *BMJ* 2006; 333: 424-429.
- Gleason MM, Egger HL, Emslie GJ, Greenhill LL, Kowatch RA, Lieberman AF, et al. Psychopharmacological treatment for very young children: contexts and guidelines. *J Am Acad Child Adolesc Psychiatry* 2007; 46: 1532-1572.
- Scahill L, Riddle MA, McSwiggin-Hardin M, Ort SI, King RA, Goodman WK, et al. Children's Yale-Brown Obsessive Compulsive Scale: reliability and validity. *J Am Acad Child Adolesc Psychiatry* 1997; 36: 844-852.
- Oner O, Oner P. Psychopharmacology of pediatric obsessive-compulsive disorder: three case reports. *J Psychopharmacol* 2008; 22: 809-811.
- Coskun M, Zoroglu S. Efficacy and safety of fluoxetine in preschool children with obsessive-compulsive disorder. *J Child Adolesc Psychopharmacol* 2009; 19: 297-300.
- Coskun M, Ozturk M, Zoroglu S. Escitalopram treatment in preschool children with anxiety disorders: a case series. *Bulletin of Clinical Psychopharmacology* 2012; 22: 262-267.
- Ercan ES, Kandulu R, Akyol Ardic U. Preschool children with obsessive-compulsive disorder and fluoxetine treatment. *Eur Child Adolesc Psychiatry* 2012; 21: 169-172.
- Geller DA, Biederman J, Stewart SE, Mullin B, Martin A, Spencer T, et al. Which SSRI? A meta-analysis of pharmacotherapy trials in pediatric obsessive-compulsive disorder. *Am J Psychiatry* 2003; 160: 1919-1928.
- Zuckerman ML, Vaughan BL, Whitney J, Dodds A, Yakhkind A, MacMillan C, et al. Tolerability of selective serotonin reuptake inhibitors in thirty-nine children under age seven: a retrospective chart review. *J Child Adolesc Psychopharmacol* 2007; 17: 165-174.
- Taylor S. Early versus late onset obsessive-compulsive disorder: evidence for distinct subtypes. *Clin Psychol Rev* 2011; 31: 1083-1100.
- Pallanti S, Quercioli L. Treatment-refractory obsessive-compulsive disorder: methodological issues, operational definitions and therapeutic lines. *Prog Neuropsychopharmacol Biol Psychiatry* 2006; 30: 400-412.