Balkan Med J 2012; 29: 99-102 • DOI: 10.5174/tutfd.2010.04056.1

Selective Serotonin Reuptake Inhibitors for Treatment of Selective Mutism

Mazlum Çöpür[1], Işık Görker[2], Türkay Demir[3]

[1]*Clinic of Child and Adolescent Psychiatry, Bakırköy Psychiatric and Neurological Diseases Hospital, İstanbul, Turkey*
[2]*Department of Child and Adolescent Mental Health, Faculty of Medicine, Trakya University, Edirne, Turkey*
[3]*Department of Child and Adolescent Psychiatry, Cerrahpaşa Faculty of Medicine, İstanbul University, İstanbul, Turkey*

ABSTRACT

Some authors suggest that selective mutism should be considered as a variant of social phobia or a disorder in the obsessive-compulsive spectrum. Recent studies indicate that pharmacological treatments may be effective in the treatment of selective mutism. In this article, four cases who were treated with citalopram and escitalopram are presented. The results indicate that the drugs were well tolerated, and the level of social and verbal interactions improved significantly. These findings have shown that citalopram and escitalopram can be considered in medication of selective mutism; nevertheless, it is essential that research be done with more cases than previous ones, in order to prove their accuracy

Key Words: Selective mutism, children, escitalopram, citalopram

Received: *30.03.2010* ***Accepted:*** *16.08.2010*

Introduction

Selective mutism was first defined by Kusmaull in 1877 as 'one who had no mental health problem, but preferred not to speak with others'(1), but the term was coined by Tramer in 1934 (2). According to ICD-10, selective mutism is characterized by normal or near-normal comprehension of the spoken language, sufficient expressive language to form social interactions and in some cases, normal or almost normal speech (3). Usually it emerges during early childhood and its incidence is comparable in both genders. Prevalence is between 0.3 and 0.8 per 1,000 in the population (4).

Selective mutism is considered difficult to treat, because it is important for the treatment to include speech therapists, teachers, school counselors and the families, in addition to child psychiatrists. Sometimes, it can be difficult to organize such multi-discipline treatment.

In the treatment of selective mutism, suggestion, persuasion, conversion, psychodynamically oriented play therapy, hypnosis, family therapy, and behavioral therapy have been used (5). The use of pharmacology as a treatment method for selective mutism has only begun to be tested empirically within the last decade, beginning with a case presented in 1990 (6). Many treatment strategies involve the alleviation of anxiety. These include pharmacological, behavioral, individual, group and family approaches (7, 8).

There are some studies suggesting that psychopharmacological treatments are also effective in selective mutism (9-11).

Some studies show that citalopram is also associated with successful results in the treatment of anxiety disorders in children and adolescents (12-14). Citalopram was reported to be effective in a case with an obsessive compulsive disorder and comorbid selective mutism, accepted as a variant of social phobia. (15). Escitalopram has been shown in clinical trials to improve anxiety symptoms associated with depression, panic disorder, and social anxiety disorder (16).

The cases in this study have been diagnosed according to DSM-IV criteria and followed by the same physician.

The aim of this study is to present two cases of selective mutism successfully treated with citalopram, and two cases successfully treated with escitalopram.

CASE 1: Patient F, who is now 9 years old, has had selective mutism since he was 5 years old. There were no complications during pregnancy, birth or the neonatal period. He walked when he was 13 months old, said his first words at 15 months, and started forming sentences when he was 2 years old. No trauma or serious physical disorders are reported. His development was uneventful until he was 5 years old, and his speech developed normally.

The Denver Development Test was administered by the patient's previous pediatrician and no developmental problems were detected.

The language sub-section of the development chart at the day-care center he attended from 3 to 3.5 years of age showed that the he knew many words and he was able to form three- to four- word sentences.

Family history: His mother reports that neither she nor her family had any mental disorders or speech impediments. His father also denied any mental disorders, but he first spoke when he was about 3 years old. Apart from this, neither he nor his family have had any mental or speech problems.

Address for Correspondence: *Dr. Mazlum Çöpür, Clinic of Child and Adolescent Psychiatry, Bakırköy Psychiatric and Neurological Diseases Hospital, İstanbul, Turkey*
Phone: +90 505 335 11 62 E-mail: sidar1996@yahoo.com.tr

Symptoms: Patient F started forming sentences at age 2 and his speech followed its normal developmental course until he was 5, being able to communicate with both family members and strangers. After this age, he began to talk only occasionally with his parents, and never with strangers. He seemed to continue to communicate with his brother, who is two years older. His parents report that he looked very uncomfortable when there were guests in the house, that he did not make much eye contact, and usually went to another room. When they were out of the house he usually avoided crowded settings with strangers, and when he had to enter such a place he talked to no one, withdrew and looked very anxious, had hot flushes and broke into a sweat. He rarely played with children other than his brother, but even then he remained passive and when someone yelled at him or bullied him, he wouldn't defend himself, but cried instead.

During his examination, he did not talk with the doctor at all, made scarce eye contact, looked very uneasy and tearful.

Previous treatment: When he was 5 years old, he was taken to a child psychiatric clinic and was treated with behavioral therapy for 6 months, and with fluoxetine 20 mg/d for 3 months, without any visible benefits.

Treatment: After a full examination, treatment consisting of citalopram 10 mg/d was started. After 1 month of therapy his parents reported that he was much more active in the house, talked with them more often, still did not talk to guests but was more comfortable and active in their company, and communicated more with his brother. He spoke a few words with the doctor at this examination. Citalopram was increased to 20 mg/d, and at the next examination one month later his parents reported that he spoke with them much more, he began to oppose some of their requests, began to speak with guests, played with children in the neighborhood more, in a more relaxed way, talked to them and defended himself when necessary. During the examination he answered all the questions asked by the doctor. At seven months of 20 mg/d citalopram therapy, patient F. started attending school and for one year now he has continued to communicate with his teacher and classmates in a normal way.

The Wechsler Intelligence Scale for Children, Revised (WISC- R) was administered after he started speaking; total IQ was 100 (verbal IQ 89, performance IQ 95, and the verbal subtest of vocabulary was 90).

After he recovered, his teacher reported that he was talking to him/her and his friends, he was able to answer his questions, and his performance was parallel to the class average.

CASE 2: Patient K, who is 11 years old, was first brought to our clinic when he was 9 and had had selective mutism since he was 5 years old.

There were no complications during pregnancy or the neonatal period. There was no history of trauma or serious illness. He walked at 20 months and began to form single words at 20 months. He began to form sentences when he was 3 years old. The Denver Development Screening Test was administered between 3.5 and 4.5 years of age at the day-care center he attended; and the social development scores were consistent with his age. Also, the development chart showed that he could express himself using long and multiple sentences.

Until he was five, he spoke normally with his parents, but rarely with strangers, and if he did, it was in a very low voice. As he was late in walking and talking, he was taken to the doctor, but no abnormality was found, except that developmentally he had motor retardation.

Family history: Both his mother and father deny any mental disorders or speech problems, either for them or their families. They stated that Patient K's two-year-younger brother was also normal.

Symptoms: Patient K's parents reported that he had been speaking to them in a low voice since he was 5, he had not communicated with anybody else and he had not played with other children in the neighborhood. When someone talked to him he would lower his head and cry; he could not defend himself, when there were guests in the house or when he was in unfamiliar settings, he was very uneasy and began to sweat. He would begin to cry when someone insisted upon getting an answer from him. Although he had been attending school for the last four years, he did not communicate with his teacher or his classmates, used his notebook in a disorderly way; his grades were low and he had to repeat a year. When his teacher forced him to speak he cried, he did not play with his classmates, and was very uncomfortable amongst them. He did not communicate with the doctor during his examination. WISC- R administered after he recovered showed the following: total IQ 90 (performance IQ 95, verbal IQ 87 and vocabulary subtest 90).

Previous treatment: He had received fluoxetine 10 mg/d therapy, but no satisfactory results were achieved.

Treatment: Citalopram 10 mg/d was started. During the first two months he gradually spoke more with his parents and brother, began to ask questions, still did not talk to strangers, but began to look more comfortable in their presence. At this time, citalopram was increased to 20 mg/d and after one month he began to communicate a little with strangers, and he talked with the doctor during his examination. The dosage was increased to 30 mg/d, after which he began to communicate with strangers more, he talked with his teacher at school, and appeared more relaxed in the company of strangers. He received citalopram 30 mg/d for six months in total, and for the last three months the dose was reduced to 20 mg/d. There was a continuous increase in his communication with strangers, with no regression.

After he recovered, his teacher reported that he was talking to him and his friends with no communication problems, and his school performance was slightly lower than the average.

CASE 3: Patient OA is a nine year old boy attending the third grade in primary school. The family came to see a child psychiatrist because he had never talked to anybody except his mother, father and school teacher. He talked to his mother freely but rarely and a few words to his father and teacher only when he needed to. No learning problems were reported. He completed homework, and was successful in written examinations. He was described as nervous and scornful.

The WISC-R administered after recovery showed the following: Total IQ 98 (performance IQ 104, verbal IQ 92, vocabulary subtest 90).

During the initial visit, he did not talk to the psychiatrist, despite the latter's efforts.

The pregnancy of patient OA's mother was reported to be normal and no health problems occurred. She had a normal delivery; no complications arose.

Patient OA started walking at the expected age, although he was physically retarded. He is 116 cm. tall, and weighs 19 kg at present. His cholesterol levels are above normal limits (230 mg). He continues his follow-up visits at the endocrinology department.

He was diagnosed as having scoliosis a few months ago and prescribed a supporter. He has nocturnal enuresis, which has become worse since the application of the supporter.

He was prescribed escitalopram 5 mg/day at his initial visit.

On the second visit, after being treated for 20 days, his mother reported that he had nausea for the first few days and that his aggression had increased. She also reported that he had been talking to his father and to his teacher to a greater extent. He answered all the psychiatrist's questions during this examination.

On the third visit, on the 35th day of treatment, he was reported to be more cheerful, in contrast to being quieter before. He had made jokes, had wanted to go out, had talked to his father. His school teacher reported that he had teased his friends in school, he was more energetic, talked too much and had been cautioned for this increased talking. On this visit, the psychiatrist observed that patient OA talked more freely and answered all questions. If he was reminded of causing mischief, he defended himself.

The 4th visit was on the 50th day of treatment. His mother reported that patient OA had spoken to many people. She reported that he had overcome his problem, but was untidy and stubborn at home. The psychiatrist observed that he interrupted his mother and talked freely.

No side effects were noted during the on-treatment assessments. His teacher evaluated him as being talkative, after taking into account that he was not talking at all previously, but in fact his talking was normal.

The treatment lasted 4 months. No symptom recurrence has been reported in the two and a half months since stopping treatment.

CASE 4: Patient V, who is now 8 years old, has had selective mutism since she was 5 years old. There were no complications during pregnancy, birth or the neonatal period. She walked when she was 11 months old, said her first words at 12 months, and started forming sentences when she was 2 years old. Her development was uneventful until 5 years old and her speech developed normally.

The Denver Development Test was administered by the patient's previous pediatrician and no developmental problems were detected.

Family history: Her mother reports that neither she nor her family had any mental disorders or speech impediments. Her father reports that neither he nor his family had any mental disorders or speech impediments.

Symptoms: Patient V started forming sentences at age 2 and her speech followed its normal developmental course until she was 5, being able to communicate with both family members and strangers. After this age she began to talk only occasionally with her parents, and never with strangers. Her parents reported that she looked very uncomfortable when there were guests in the house, that she did not make much eye contact and usually went to another room. She did not communicate with her teacher or her classmates. When her teacher forced her to speak, she cried, would not play with her classmates, and was very uncomfortable amongst them.

During her examinations, she did not talk with the doctor at all and looked very uneasy and tearful.

Treatment: After a full examination, treatment with escitalopram 5 mgr/d was started. After one month of therapy her parents reported that she is much more active in the house and talked with them more often. She spoke a few words with the doctor at this examination. Escitalopram was increased to 10 mgr/d and at the next examination one month later her parents reported that she was speaking with them much more, that she had begun to oppose some of their requests, and she had begun to speak with guests and played with other children in the neighborhood more, in a more relaxed way; she had begun talking to them and defending herself when necessary. During the examination she answered all the questions asked by the doctor.

No side effects were noted during the on-treatment assessments.

The treatment lasted 4 months. No symptom recurrence has been reported in the three months since stopping treatment.

Wechsler Intelligence Scale for Children, Revised (WISC-R) was administered after she started speaking; total IQ was 107(verbal IQ 104, performance IQ 108).

After she recovered, her teacher reported that she was talking to him and to her friends, she was able to answer his questions, and her performance was parallel to the class average.

Discussion

In this case series, we demonstrated that children with selective mutism benefited from citalopram -an SSRI antidepressant agent- treatment. In all cases, symptoms of social phobia were present alongside selective mutism. After citalopram treatment, the children began to speak in situations in which they had been taciturn before, and began to enter strange settings that they had been avoiding. They were no longer uncomfortable with strangers, began to act, in a more relaxed manner, were able to defend themselves against other children, and began to reveal their wishes more freely. These results support the view that there is a connection between selective mutism and social phobia. There were no side effects during the treatment period.

There is a concept that regards selective mutism as a variant of social phobia (9, 10).

In social phobia, the person experiences anxiety, shyness, and fear of scrutiny, affecting performance in general (17), while in selective mutism the person experiences anxiety in some certain situations requiring verbal communication. Also, this can be accompanied by some features of social phobia

such as social anxiety, withdrawal, sensitivity (3) and extreme shyness, fear of social failure, and avoidance of social life (18). Medications, such as antidepressants containing SSRI, shown to be helpful for treating social phobia, have been increasingly used to treat children with SM (19). There are a variety of different theories about what causes selective mutism. One of those theories is that selective mutism is not a disorder, but rather a manifestation of social phobia (6, 9, 10). There are some studies suggesting that psychopharmacological treatments are also effective in selective mutism (9-12).

There are only a few publications concerning the use of citalopram and other SSRIs in selective mutism. We believe that the effects of citalopram, escitalopram, and other SSRIs on children with anxiety disorders and selective mutism should be further investigated with controlled trials.

Conflict of Interest

No conflict of interest was declared by the authors.

References

1. Kussmaul A. Die Störungen der Sprache. Leipzig, FCV Vogel; 1877.
2. Tramer M. Elective mutism. Z. Kinderpsychiatr 1934;1:30-5.
3. World HealthOrganization. ICD- 10 international classification of mental disorders. Geneva: World Health Organization; 1992.
4. Brown JB, Lloyd H. A controlled study of children not speaking at school. J Assoc Workers Maladjust Child 1975;49-63.
5. Browne E, Wilson V, Layborn PC. Diagnosis and treatment of elective mutism in children.J Am Acad Child Psychiatry1963;2:605-17. [CrossRef]
6. Glowny DH, Weinstock RC. Phenelyzine treatment of elective mutism.Journal of Clinical Psychiatry 1990;51:384-5.
7. Dow SP, Sonies BC, Scheib D, Moss SE, Leonard HL. Practical guidelines for the assessment and treatment of selective mutism. J Am Acad Child Adolesc Psychiatry 1995;34:836-46. [CrossRef]
8. Wright HH, Holmes GR, Cuccaro ML, Leonhardt TV. A guided bibliography of selective mutism (elective mutism) literature. Psychol Rep 1994;74:995-1007. [CrossRef]
9. Black B, Uhde TW. Elective mutism as a variant of social phobia. J Am Acad Child Adolesc Psychiatry1992;31:1090-4. [CrossRef]
10. Black B, Uhde TW. Fluoxetine treatment of elective mutism; a double blind plecebo controlled study. J Am Acad Child Adolesc Psychiatry 1994;33:1000-6. [CrossRef]
11. Dummit ES, Klein RG, Tancer NK, Asche BK, Martın J. Fluoxetine treatment of children with selective mutism: an open trial.J Am Acad Child Adolesc Psychiatry 1996;35:615-21. [CrossRef]
12. Lepola U, Leisonen E, Koponen H. Letter to the editor- Citalopram in anxiety disorder of childhood and adolescence.Eur Child and Adolesc Psychiatry 1994;3:277-9. [CrossRef]
13. Sourander A. Case study: Selective serotonin reuptake inhibitors in the treatment of severely disturbed preadolescents with comorbid diagnosis. Nord J Psychiatry 1999;3:431-3. [CrossRef]
14. Lepola U, Leinonen E, Koponen H. Citalopram in the treatment of early onset panic disorder an school phobia. Pharmacopsychiat 1996;29:30-2. [CrossRef]
15. Thomson PH., Rasmussen G., Anderson CB.:Elective mutism: A 17-year old girl treated success fully with citalopram.Nord J Psychiatry 1999;53:427-9. [CrossRef]
16. Davidson JR, Bose A, Korotzer A, Zheng H. Escitalporam in the treatment of generalized anxiety disorder:Double- blind, plecabo controlled flexible dose study.Depression and Anxiety.Publıshed online 2004;19:234-40.
17. Bernstein GA, Layne AE. Introduction: Social Phobia. In: Sadock BJ,editor. Comprehensive Textbook of Psychiatry. New York: Lipincott Wiliam& Wilkins; 2005.
18. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington: DC, American Psychiatric Association; 1994.
19. Dow SP, Sonies BC, Scheib D, Moss SE, Leonard HL. Practical guidelines fort theAssessment and treatment of selective mutism. J Am Acad Child Adolesc Psychiatry 1995;34:836-46. [CrossRef]