

(Clinical Experience)

A case of childhood-onset fluency disorder reduced by escitalopram

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Abstract:

We experience a case of childhood-onset fluency disorder mildly affected by escitalopram. The case is 28 years old, male, with no close relatives with childhood onset fluency disorder. His parents had been aware of his stuttering since childhood and he had been treated by a speech therapist with no effect. She came to our clinic. She was started on medication. The patient started medication. In the beginning, she had no progress and failed, but paroxetine responded. The patient's longstanding stuttering almost disappeared. However, the patient dislikes sexual dysfunction and stops taking it on his own. The stuttering flared up, but the stuttering is now well controlled with escitalopram. He has been on escitalopram continuously as he relapses when he stops the drug. He is also experiencing sexual dysfunction that is being treated with sildenafil.

key words:

childhood-onset fluency disorder, escitalopram, paroxetine, sildenafil

## 1. Introduction

In our country, stuttering has long been considered a bad habit or an ingrained bad habit. There is a widespread opinion that if you associate with a person who stutters, you will transfer your stuttering to him or her, and that if you imitate stuttering, you will become a stutterer.

There is also a widespread belief that tanden breathing techniques are the best treatment for childhood onset fluency disorders. It has been said that the Tanda Breathing Method is the best treatment for childhood-onset dysfluency disorder, and that it has been shown to be very effective in making people speak in front of a large number of people. In this way, the gut theory is still prevalent in Japan.

## 2. Cases

Case] 28 years old, male (right-handed)

(The content has been slightly altered to protect your privacy.)

Family history: nothing of note, no relatives with childhood-onset fluency disorder

Medical history: nothing of note

By the age of 4 or 5 years old, he was aware of his stuttering. He underwent treatment with a speech therapist after entering elementary school, but it was ineffective and was discontinued after a year.

His personality is serious, honest and friendly. He is well-liked by people.

He is of medium build, and his grades are not very good. He was bullied in elementary and junior high school because of his stutter. After graduating from high school, he got a job at a small auto repair shop, a distant relative of his parents. He worked there for 10 years without any problems (no "torment" because it was a small repair shop).

When he was 28 years old, he came to the clinic because he read on the Internet that SSRIs (selective serotonin reuptake inhibitors) can cure childhood onset fluency disorder. After one month of taking this dosage, the patient's symptoms were somewhat lessened, but she requested a more effective drug and changed to sertraline (2,4). However, sertraline did not work at all and the drug was discontinued after one month. This drug was effective (she could realize that the drug was effective after 3 or 4 days) and her disease became mild and almost remission.

It was continued at a small dose of paroxetine 10 mg/day to minimize side effects, but the patient disliked the sexual dysfunction and discontinued it on his own. The patient does not develop a withdrawal syndrome, but her stuttering flares up. The patient is still on escitalopram 10 mg/day because stuttering tends to flare up after stopping the drug. escitalopram also causes sexual dysfunction like paroxetine but the patient is treated with sildenafil. The patient says that the sexual dysfunction is stronger with paroxetine than with escitalopram, and she did not notice any sexual dysfunction during the first dose of escitalopram. 3.

### 3. Discussion

Childhood-onset fluency disorder mostly occurs between the ages of 2 and 7 years, and about 75% of childhood-onset fluency disorders that occur between 2 and 7 years of age will resolve spontaneously by puberty without any treatment. It is ubiquitous in all regions of the world, affecting about 1% of adults. It is more common in males than in females, with a male to female ratio of 4:1.

Childhood-onset fluency disorders are considered to be organic functional abnormalities in the basal ganglia.

Childhood-onset fluency disorders are often treated by a speech-language therapist in mild cases of childhood, but as the child ages, treatment by a speech-language therapist becomes less effective. It is no exaggeration to say that it does not work at all after middle school.

Childhood-onset fluency disorders are highly hereditary, and if a parent has a childhood-onset fluency disorder, their child is three times more likely than the general population to have a childhood-onset fluency disorder<sup>3</sup>).

Recently, many cases of stuttering have been found in families around the world and loci have been determined<sup>6</sup>). However, stuttering often occurs after a severe head injury or stroke<sup>11</sup>).

In Europe and the United States, aggressive treatment of stuttering has been widely used in the treatment of stuttering, including pharmacotherapy.

There are many reports of remission of childhood-onset fluency disorders with paroxetine. There have been many reports of accidental remission of childhood onset fluency disorder during treatment of OCD<sup>1,10,12</sup>), but there are also reports of double-blind studies that confirmed the efficacy of paroxetine<sup>3</sup>).

3) Thus, it is no exaggeration to say that paroxetine has established its position as a treatment for childhood-onset fluency disorders. At the very least, paroxetine is thought to

be effective in many cases of childhood-onset fluency disorder. It is speculated that the mechanism of action is to correct some functional abnormalities in the basal ganglia, but this has not been clarified<sup>3</sup>). The effect is limited to the time of administration and relapses when the drug is discontinued.

Re-administration of escitalopram resulted in re-melioration of stuttering in this case, but at the time of the first dose of escitalopram, the stuttering was only somewhat less severe. The fact that the patient's stuttering was sufficiently mitigated by reapplication of paroxetine must be interpreted as a result of the fact that paroxetine provided a good basis for the mitigation of stuttering.

Sexual dysfunction, a side effect of paroxetine, occurred in this case even at a small dose of 10 mg/day. Sexual dysfunction also occurred with a relatively small dose of escitalopram (10 mg/day), and sildenafil was used.

--- Consent from the patient was obtained for this submission: ---

COI: No COI to disclose

[Reference]

- 1) Boldrini M, Rossi M, Placidi GF : Paroxetine efficacy in stuttering treatment. *Int J Neuropsychopharmacol*, 6 ; 311-312, 2003.
- 2) Brewerton TD, Markowitz JS, Keller SG : Stuttering with sertraline. *J Clin Psychiatry*, 57 ; 90-91, 1996.
- 3) Busan P, Battaglini PP., Borelli M et al. : Investigating the efficacy of paroxetine in developmental stuttering. *Clin Neuropharmacol*, 32 ;183-188, 2009.
- 4) Christensen RC, Byerly MJ, McElroy RA : A case of sertraline-induced stuttering. *J Clin Psychopharmacol* 16 ; 92-93, 1996.
- 5) Costa D, Kroll R : Sertraline in stuttering. *J Clin Psychopharmacol*, 15 ; 443-444, 1995.
- 6) Gertz EM, Mundorff J, Lukong J, et al. : Linkage analysis of a large African family segregating stuttering suggests polygenic inheritance. *Hum Genet*, 132 ; 385-396, 2013.
- 7) Guthrie S, Grunhaus L : Fluoxetine-induced stuttering. *J Clin Psychiatry*, 51 ; 85, 1990.
- 8) Kumar A, Balan S : Fluoxetine for persistent developmental stuttering. *Clin Neuropharmacol*, 30 ; 58-59, 2007.
- 9) McCall WV : Sertraline-induced stuttering. *J Clin Psychiatry*, 55 ; 316. 1994.
- 10) Murray MG, Newman RM : Paroxetine for treatment of obsessive-compulsive disorder and comorbid stuttering. *Am J Psychiatry*, 7 ; 1037, 1997.
- 11) Sahin HA, Krespi Y, Yilma Z : Stuttering due to ischemic stroke. *Behav Neurol*, 16 : 37-39, 2005.

12) Schreiber S, Chaim G : Paroxetine for secondary stuttering: Further Interaction of Serotonin and Dopamine. The Journal of Nervous & Mental Disease, 185 : 465-467, 1997.

Paroxetine efficacy in childhood-onset fluency disorder treatment : A case report.

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