A Case With Sexual Dysfunction Improved By Vortioxetine Dose Reduction and Sensate Focus Exercises

Abstract

Major depression disorder in its nature and antidepressants as side effects may cause people to have sexual dysfunction. In the literature, it has been shown in a few examples that it may be beneficial for sexual dysfunction to switch drugs from a selective serotonin reuptake inhibitor to vortioxetine. Vortioxetine is an antagonist for 5-HT3 and 5-HT7, a partial agonist for HT1B and agonist for 5-HT1A and has been known for its low level of sexual dysfunctionality. There is a case showing that vortioxetine with high doses might cause sexual impairment and dose reduction might be a treatment option for this side effect. In this case, vortioxetine dose reduction and sexual improvement were simultaneous. Although the sensory exercises might also help the treatment of sexual dysfunction, it should not be ignored that vortioxetine may cause dose-dependent sexual side effects.

Keywords: *Depression, sexual dysfunction, vortioxetine*

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Introduction

Vortioxetine is one of the antidepressants which has been using commonly in clinical practice. Although antidepressants usually have sexual side effects, vortioxetine has been known for its low level of sexual dysfunctionality.[1] There is a case showing that vortioxetine with high doses might cause sexual impairment and dose reduction might be a treatment option for this side effect.

Case Report

A 38-year-old woman admitted to our outpatient clinic with the complaint of a decreased libido for the past 1 month. She has also noticed anhedonia, lack of motivation, and depressed mood for the last 7 months. In her clinical examination, depressive symptoms were apparent and Beck depression scale was applied. The score was 21, which is coherent with her initial diagnosis which is mild depression after a critical psychiatric evaluation. She also pointed out that she become using vortioxetine 20 mg/day upon one of her friend's recommendation 2 months ago. Her symptoms have alleviated; however, she started to complaint about decreased libido for the last 1 month.

She has been married for 20 years. The couple has two children who are 14 and 18 years old. Her husband is 43 years old, graduated from primary school, and working in a textile factory. She graduated from high school and working in the manufacturing sector.

History

She got her first menstrual period at the age of 13. She had known about menstruation at that time, and her family had a neutral attitude. She acquired superficial information about sexual health with her middle school friends, and she masturbated at the age of 17 for the first time. She had continued to masturbate twice a year, and she had been feeling ashamed of this behavior. She had flirted with a boy at the same age with her when they were 16 for 1 year. They did not have any sexual intimacy. She met her husband afterward and she had her first sexual intercourse in the 1st month of her marriage. They have been having sexual intercourse once every 2 months for the last 7 months, while she has had sexual desire frequency of once every 2 or 3

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months. On the other hand, she had the frequency of 2 or 3 times a week before this period. For the last 7 months, after she has begun to work harder at work, she could not have sexual arousal or orgasm during her sexual encounter with her husband although she had before.

Her husband was circumcised at the age of 6, and he acquired sexual information about masturbating from one of his relatives at the age of 13. He began to masturbate once a day when he was 13. After his marriage, he stopped masturbating because he had been feeling guilty and he worried that it could be infidelity to his wife. His first sexual intercourse was with a woman by paying money when he was 18. He experienced sexual arousal and desire, and the intercourse had lasted for 2 min.

They had acquainted with each other with the help of their friends. They got married after 6 months of engagement when they were in love with each other. On the first night of their marriage, they did not have a sexual encounter because she was ashamed. They postponed their first intercourse for 1 month, and they did not have any problem afterward.

Treatment

Evaluation of their history and symptoms has been made during their first psychiatric interview. Interviews were made as couple and individually. They have been told about sexual anatomy and physiology in the next sessions. They had a few questions and they were answered during sessions. The true version of sexual myths was tried to be explained to the couple. In the next weekly sessions, they have been banned from sexual intercourse. As a homework exercise, the woman was told to touch herself in front of a mirror when she was alone. Later, sensate focus-I was explained and the couple was told to do the exercise three times a week. The dosage of vortioxetine has been decreased from 20 to 10 mg/day and ceased gradually. After the woman noted that she got benefit from sensate focus and her sexual desire frequency had increased to once a week, sensate focus-II was explained and told to do the exercise 3 times a week. In the next session, she emphasized that her symptoms had completely resolved and they were having sexual intercourse as they wanted. Her control score of Beck depression scale was 6, and psychiatric examination was not significant for any depressive symptoms. Consequently, the treatment was stopped.

Discussion

In our case, it can be understood that the symptoms of the patient that are having no desire for sexual intercourse, having a little or no sexual fantasy, and having difficulties to start a sexual activity or to respond to her husband's intentions are acquired after a couple of years of her relation with her husband. Although these symptoms may lead to a diagnosis which is sexual arousal disorder, it cannot be ignored that the patient had also symptoms related with major depression disorder at the time she started to use medication. As she started using vortioxetine 20 mg/day and her sexual dysfunctionality started afterward, it might be likely that her symptom might have originated from the use of this medication. Although there have been sensate focus exercises applied for her treatment, it cannot be ignored that decrease the dose of the medication might be helpful for symptom alleviation.

Major depression disorder in its nature and antidepressants as side effects may cause people to have sexual dysfunction.[2] Although serotonin reuptake inhibitors have a very important role in depression treatment, they may cause sexual dysfunction as a side effect during the treatment.[1,3]

Vortioxetine is one of the antidepressants that inhibit the serotonin reuptake mechanism, and it has a strong affinity to receptors and multimodal action. Vortioxetine is an antagonist for 5-HT_3 and 5-HT_7, a partial agonist for HT_{1B} and agonist for 5-HT_{1A}.[4] In the literature, it has been shown in a few examples that it may be beneficial for sexual dysfunction to switch drugs from a selective serotonin reuptake inhibitor to vortioxetine.[5,6] Studies implied that the sexual side effects of vortioxetine are not statistically different from placebo treatment. The only significant difference was having nausea when vortioxetine treatment was compared with the placebo.[7] More reliable results might be obtained by comparing the vortioxetine treatment and placebo in groups with healthier and more regular sexual lives.[8]

Results

In this case, vortioxetine dose reduction and sexual improvement were simultaneous. Although the sensory exercises might also help the treatment of sexual dysfunction, it should not be ignored that vortioxetine may cause dose-dependent sexual side effects. Comprehensive experimental studies may further improve the knowledge about vortioxetine effects and their causes. Clinicians may consider that high doses of vortioxetine may cause sexual side effects, and they may reduce the dose for treatment of sexual impairment in clinical practice for patients having a sexual dysfunction.

Patient informed consent

Patient informed consent was obtained.

Ethics committee approval

There is no need for ethics committee approval.

Conflict of interest

There is no conflict of interest to declare.

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Author contribution area and rate

Süleyman Dönmezler (%50): data acquisition, analysis interpretation

Meltem Şen (%20): involved in refining the conception of the work, the interpretation of data for the work and revising it critically for important intellectual content

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References

1. Jacobsen P, Zhong W, Nomikos G, Clayton A. Paroxetine, but not vortioxetine, impairs sexual functioning compared with placebo in healthy adults: A randomized, controlled trial. J Sex Med 2019;16:1638-49.
2. Kennedy SH, Rizvi S. Sexual dysfunction, depression, and the impact of antidepressants. J Clin Psychopharmacol 2009;29:157-64. doi: 10.1097/JCP.0b013e31819c76e9.
3. Rizvi SJ, Kennedy SH. Management strategies for SSRI-induced sexual dysfunction. J Psychiatry Neurosci 2013;38:E27-8. doi:10.1503/jpn.130076.
4. Alvarez E, Perez V, Artigas F. Pharmacology and clinical potential of vortioxetine in the treatment of major depressive disorder. Neuropsychiatr Dis Treat 2014;10:1297-307. doi: 10.2147/NDT.S41387.
5. Jacobsen PL, Mahableshwarkar AR, Chen Y, Chrones L, Clayton AH. Effect of vortioxetine vs. escitalopram on sexual functioning in adults with well-treated major depressive disorder experiencing ssrı-ınduced sexual dysfunction. J Sex Med 2015;12:2036-48. doi: 10.1111/jsm.12980.
6. Gonda X, Sharma SR, Tarazi FI. Vortioxetine: A novel antidepressant for the treatment of major depressive disorder. Expert Opin Drug Discov 2019;14:81-9.
7. Garnock-Jones KP. Vortioxetine: A review of its use in major depressive disorder. CNS Drugs 2014;28:855-74. doi: 10.1007/s40263-014-0195-x.
8. Montejo AL, Montejo L, Navarro-Cremades F. Sexual side-effects of antidepressant and antipsychotic drugs. Curr Opin Psychiatry 2015;28:418-23. doi: 10.1097/YCO.0000000000000198.