Successful Treatment of Premenstrual Dysphoric Disorder with Irritable Bowel Syndrome using Sulpiride

Asem Abdualziz S. Alageel

Department of Clinical Neurosciences, Imam Mohammad Ibn Saud Islamic University (IMSIU), College of Medicine, Saudi Arabia

Abstract

Premenstrual dysphoric disorder (PMDD) is prevalent, more severe than premenstrual syndrome (PMS), and a challenging disorder. The first line of treatment is pharmacotherapy. Non-pharmacological therapy includes aerobic exercise, consumption of complex carbohydrates and frequent meals, relaxation training, light therapy, sleep deprivation, and cognitive-behavioral therapy could be helpful. In this case report, a lady suffering from PMDD and irritable bowel syndrome (IBS) did not respond to antidepressants, painkillers, and melatonin. She used to sit at home and in her room these days, waiting for the PMDD severity to decrease. Her condition reached remission after taking a small dosage of sulpiride and stopped on the last day of the period. The patient is satisfied with the result since concerns about antidepressants are addressed and avoided. This case provides a new approach to using low-dosage sulpiride temporarily every month in patients with both PMDD and IBS. To our knowledge, there have not yet been any studies on this treatment option for PMDD with IBS

Keywords: Premenstrual dysphoric disorder, irritable bowel syndrome, sulpiride

Background

Most females of reproductive age report one or more mild psychological or somatic symptoms for days before the start of menses. Examples include moodiness, trouble sleeping, food cravings, cramps in the lower abdomen and back, breast tenderness, breast soreness, and bloating. These symptoms are not severe and do not cause functional impairment⁽¹⁾. Premenstrual dysphoric disorder (PMDD) causes severe and persistent symptoms including depression, irritability, and anxiety. Premenstrual dysphoric disorder (PMDD) oc-

curs in the week or two before the menstrual period begins as hormone levels start to fall after ovulation. In the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders, or DSM-IV⁽²⁾, PMDD criteria were proposed in the appendices and classified as "depressive disorder not otherwise specified." The criteria summarized below are included in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)⁽³⁾. The prevalence of PMDD is between 3% and 8% of women, with a wide range according to country and culture⁽⁴⁾. According to DSM-5, a diagnosis of PMDD requires

^{*}Corresponding AuthorAalageel@imamu.edu.sa

during most menstrual cycles throughout the past year, at least five of the relevant symptoms must be present in the last week before the onset of menses, start to improve within a few days after the onset of menses, and become absent in the week post-menses. **Psychological** symptoms include marked affective labilities (e.g., mood swings, feeling suddenly sad or tearful); marked irritability; marked depressed mood; feelings of hopelessness; self-deprecating thoughts; marked anxiety, tension and/or feelings of being keyed up or on edge; decreased interest in usual activities; subjective difficulty in concentration; lethargy, easy fatigability, or marked lack of energy; marked change in appetite, hypersomnia or insomnia, and a sense of being overwhelmed or out of control. Physical symptoms include breast tenderness or swelling, joint or muscle pain, a sensation of "bloating," or weight gain. Currently, there is no consensus on the cause of PMDD. As with other psychiatric disorders, genetic, biological, psychological, environmental, and social factors all seem to play a role in the pathogenesis of PMDD. Both pharmacological and nonpharmacological treatments are helpful. Non-pharmacological therapy includes aerobic exercise, consumption of complex carbohydrates and frequent meals, relaxation training, light therapy, sleep deprivation, and cognitive-behavioral therapy⁽¹⁾. However, the pharmacological option is the first choice. The challenge is to tailor treatment based on patient needs and expectations. Here we present a successful novel treatment approach for PMDD with irritable bowel syndrome based on patient history.

Case presentation

A 38-year-old engaged female with a known case of irritable bowel syndrome

(IBS) came to the clinic. For the last three years, she has experienced periodic symptoms of insomnia, depressed mood, anxiety, lack of appetite, and difficulty concentrating. She also reports physical symptoms such as muscle pain, breast tenderness, and acne flare-ups one to two weeks before her period. The severity of her symptoms decreases gradually three days after the onset of menstrual period. The patient said that during the rest of the month, she is fine. She said her symptoms have increased this year. She meets the diagnostic criteria of premenstrual dysphoric disorder. The patient reports that she used to go every month to the emergency department for IV painkillers (Acetaminophen 1000 mg IV q6hr as needed or Ibuprofen 400 mg IV q4-6hr as needed). She said that these treatments sometimes work, but usually they do not. The patient reports that her IBS symptoms have gotten worse, and her main symptoms are now severe abdominal pain, nausea, and vomiting to the point of pain. She tried desvenlafaxine 50 mg for six months, but it was not effective. Her previous psychiatrist chose it because the patient did not want SSRIs due to concerns about sexual dysfunction and weight gain. She tried Melatonin 3 mg as needed for sleep and Amitriptyline 100 mg daily for 3 months, but they were not helpful. Her symptoms clearly affected her functioning, and she became less social. She used to sit at home and in her room these days, waiting for the PMDD severity to decrease. Because she has moderate to severe IBS and periodic somatic symptoms of PMDD more than psychological ones, I gave her sulpiride 50 mg when her PMDD symptoms started, and she responded. The dosage was then increased to 100 mg daily, and she reached remission. She stopped gradually after the last day of her period (day 6). She has been given sulpiride for her last seven menstrual Alageel AS. 18

periods with no significant side effects and has returned to her baseline function. She did not notice any significant weight gain because the sulpiride was used temporarily. The patient is satisfied with the sulpiride because she can take it for a brief period and stop it as soon as PMDD symptoms disappear.

Discussion

The American College of Obstetricians and Gynecologists recommends pharmacotherapy as the first line of treatment for PMDD^{(5).} Meta-analyses of randomized clinical trials reveal varying effect sizes for luteal phase SSRI treatment^(6,7). The common side effects of SSRI such as weight gain and sexual dysfunction(8) did not encourage our patient to try it for continuous use. Studies have examined the method of starting SSRIs as soon as PMDD symptoms initiate, and then stopping at menstruation; this was helpful to a certain extent⁽⁹⁾. Research about the efficacy of hormonal treatment for PMDD is limited, and it is not very helpful. For example, a study of progesterone for PMS did not find enough evidence for its use. Studies of oral contraceptives containing the synthetic progestin drospirenone found that drospirenone (3mg) plus ethinyl estradiol (20µg), levonorgestrel (90µg), ethinyl estradiol (20µg), gonadotropin-releasing hormone (GnRH) agonists and inhibitors were used with varying responses, but the evidence was not strong. Therefore, it is suggested that hormonal treatment be used only if SSRIs fail⁽¹⁰⁾. Sulpiride has shown good efficacy for somatic complaints. The efficacy and safety of sulpiride in somatoform disorder cases were confirmed in a large-scale study in which sulpiride treatment was associated with a significant reduction in the severity of somatic symptoms⁽¹¹⁾. In addition, sulpiride has been used as a safe and

effective agent in the management of IBS⁽¹²⁾. The successful management of this case may be because the patient had primarily somatic PMDD symptoms and moderate to severe IBS symptoms. To our knowledge, there have not yet been any case studies on this treatment option for PMDD with IBS. In clinical practice, cases sometimes do not fit the standard recommendations. The patient's expectations of treatment have a role in a psychiatrist's treatment plan, so the practitioner needs to tailor their treatment based on patient needs and the best available evidence. Finally, further study is needed to confirm the efficacy of sulpiride in the management of PMDD and IBS.

Conclusion

Premenstrual dysphoric disorder is a challenging condition. The symptoms of PMDD are not continuous, and somatic symptoms are a significant component of both the diagnosis and the patient's suffering. Choosing a suitable medication based on pros and cons contributes to successful treatment and patient satisfaction. This case provides a new approach to using low-dosage sulpiride in patients with both PMDD and IBS, but more studies are needed to confirm its efficacy and safety.

Abbreviations

PMDD: Premenstrual dysphoric disorder

PMS: Premenstrual syndrome IBS: Irritable Bowel Syndrome

Ethics approval and consent to participate: Not applicable.

Consent for publication: A written informed consent was obtained from the patient and her attendant regarding publishing this data, maintaining the confidentiality of the patient in all respects.

Availability of data: Not applicable.

Competing interests: The author declares that they have no competing interests.

Funding: No funding was received for this report.

References

- 1. Goweda R, Alkot MM, Alturkistani FA, et al. Prevalence of premenstrual dysphoric disorder among medical students of Umm Al-Qura University, Makkah Al-Mukaramah, Kingdom of Saudi Arabia. W Fam Med J 99(3177), 1-7.
- 2. American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.).
- 3. American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.)
- 4. Hsiao MC, Liu CY. Unusual manifestations of premenstrual syndrome. Psychiatry Clin Neurosci. 2007 Feb;61 (1): 120-3.
- 5. American College of Obstetricians and Gynecologists. "Clinical management guidelines for obstetrician-gynecologists." ACOG Practice Bulletin 7 (2003): 643-648
- 6. Brown J, O'Brien PMS, Marjoribanks J et al. Selective serotonin reuptake inhibitors for premenstrual syndrome. 2002, Cochrane Database of Systematic Reviews, (3).
- 7. Shah NR, Jones JB, Aperi J, et al. Selective serotonin reuptake inhibitors for premenstrual syndrome and premenstrual dysphoric disorder: a meta-analysis. Obstet Gynecol. 2008 May;111 (5):1175-82.
- 8. Halbreich U. Selective serotonin reuptake inhibitors and initial oral contraceptives for the treatment of PMDD: effective but not enough. CNS Spectr. 2008 Jul;13(7):566-72.

- Landén M, Nissbrandt H, Allgulander C, et al. A placebo-controlled trial comparing intermittent and continuous paroxetine in premenstrual dysphoric disorder. Neuropsychopharmacology. 2007 Jan;32(1):153-61.
- 10. Hantsoo L, Epperson CN. Premenstrual Dysphoric Disorder: Epidemiology and Treatment. Curr Psychiatry Rep. 2015 Nov;17(11):87.
- 11. Rouillon F, Rahola G, Van Moffaert M, et al. Study Observing Multicultural Attitudes to Dogmatil. Sulpiride in the treatment of somatoform disorders: results of a European observational study to characterize the responder profile. J Int Med Res. 2001 Jul-Aug;29(4):304-13
- 12. El-Reshaid K, Al-Bader SH. "New regimen for treatment of irritable bowel syndrome with emphasis on Sulpride as the sole maintenance therapy." Journal of Drug Delivery and Therapeutics 2019, 9(5): 154-157.