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LETTER TO THE EDITOR

Persistent genital arousal disorder developing secondary to generalized anxiety disorder

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Dear Editor,

Persistent genital arousal disorder (PGAD) is a condition in which the typical physiological responses associated with sexual arousal persist for an extended period and do not end spontaneously; the feeling of arousal continues even after an orgasm or multiple orgasms are needed to reduce arousal (1). This report describes a patient diagnosed with PGAD secondary to generalized anxiety disorder. Informed consent was obtained from the patient.

A 29-year-old female patient visited the psychiatric clinic with complaints of persistent sexual arousal after orgasm for two years and spontaneous orgasms without any stimulus. She described sensations of vibration, heat, and slight tickling during these arousals and orgasms. Until two years ago, the patient had a regular sexual life and did not experience any sexual dysfunctions. She masturbated 1–2 times a week. She sought psychiatric help due to intense anxiety, restlessness, muscle pain, and sleep problems persisting for three months and was diagnosed with generalized anxiety disorder in 2021. Her score was 9 on the Beck Depression Inventory (BDI) (2, 3) and 20 on the Beck Anxiety Inventory (BAI) (4, 5). The patient reported no complaints regarding sexual desire and arousal. She was prescribed 50 mg of sertraline, which she did not take. Instead, she masturbated 2–3 times a day to alleviate her anxiety, noting a reduction in tension afterward. In July 2021, she first observed that the duration of orgasm following sexual intercourse was prolonged. She then began to experience arousal without genital contact and had spontaneous orgasms 2–3 times a day.

The patient, who visited the Obstetrics and Gynecology department in December 2021 and found no gynecological disease, was referred to neurology. Electroencephalogram (EEG) and magnetic resonance imaging (MRI) examinations revealed no neurological pathology. The neurologist recommended carbamazepine as it was thought to be beneficial for the patient. Although the patient used carbamazepine 400 mg/day for three months, there was no improvement. Since the examination findings, including blood tests (hemogram, blood urea, serum creatinine, blood sugars, lipid profile, thyroid function tests, liver function tests) and hormone analyses (estrogen, progesterone, follicle-stimulating hormone, luteinizing hormone) were within normal limits, she was referred to psychiatry in June 2023.

She had no history of psychiatric illness, chronic disease, regular medication use, or use of psychoactive substances. Upon her initial visit, she described feelings of fatigue and intense shame, mentioned that her social life was affected, and she became withdrawn. Her BDI score was 21, and her BAI score was 35. She was given psychoeducation and started on fluoxetine 20 mg/day. The patient was offered psychotherapy but stated she was not ready to see a psychotherapist due to her feelings of shame.

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At the follow-up visit one month later, her depressive and anxiety symptoms had regressed (BDI: 15, BAI: 12), and spontaneous arousal and orgasm had decreased by half. The fluoxetine dose was increased to 40 mg/day. Although there were significant improvements in her anxiety and depression levels, there was no change in the intensity of arousal and orgasm. The patient was started on clonazepam 1 mg twice daily. When the patient returned two weeks later, she had experienced spontaneous arousal only twice during this period. She experienced spontaneous orgasms only five times in the following three months; her sexual desire and activity increased, and she felt socially relaxed.

Persistent genital arousal disorder in women has likely been known for many years, though it is a diagnosis that has only been identified recently. Patients experiencing PGAD may delay seeking help due to concerns about shame and stigma (6).

The etiology of PGAD is still controversial. Some women may have physical abnormalities such as pelvic varicose veins (7). Cases of PGAD due to epilepsy have been reported (8). In some patients, hyperesthesia may be found in the pudendal nerve dermatome, possibly resulting from pudendal neuropathy (9). However, most cases of PGAD are probably idiopathic. A relationship between selective serotonin reuptake inhibitors (SSRIs)/serotonin-norepinephrine reuptake inhibitors (SNRIs) and PGAD has been discussed. Antidepressant use was reported in 45% of women with PGAD; however, the same study acknowledged that anxiety and depression rates were high in symptomatic women and that there was no causality between antidepressant use and genital stimulation (1).

All patients are recommended to undergo a gynecological examination focusing on the presence of clitoral, vulvar, or labial hyperesthesia, engorgement, or visible varicose veins (8). Laboratory examinations and hormone evaluations should be performed. An EEG should be obtained in all women with a history of epilepsy, and an EEG should be considered in women without a history of epilepsy if there is no other obvious etiology for their genital symptoms (10). If no underlying pathology is found to explain the symptoms, psychiatric evaluation is required. A detailed developmental and sexual history, trauma history, and triggering factors must be questioned. Many people diagnosed with PGAD experience increased stress, depression, and anxiety symptoms (11).

Different pharmacological and nonpharmacological treatment strategies have been tried (12). Treatment is still limited and generally focuses on medication, psychotherapy, and psycho-education (3). Relieving factors were mainly distraction, relaxation, physical exercise, masturbation, and swimming (13). In this case, a significant decrease in symptoms was observed with psycho-education and pharmacological treatment. Paroxetine, duloxetine, pramipexole, ropinirole, and clonazepam treatments were reported to be pharmacologically effective (14). It is also stated that fluoxetine can be used and is beneficial (15). Pharmacological treatment, especially SSRIs, may be preferred for different patient subtypes (8). Although the biological mechanisms underlying PGAD are not clearly known, animal studies suggest that there is evidence of 5-HT1A receptor activation by SSRIs and that orgasm and arousal are affected in rats exposed to fluoxetine (16). This finding may explain how fluoxetine treats PGAD when administered to the patient. Additionally, the reduction of anxiety may have contributed to the alleviation of sexual dysfunction (17). Clomipramine, in combination with psychotherapy, recommended as the treatment of choice in PGAD (18).

A thorough examination of the most common causes of PGAD is extremely valuable. However, considering that the condition can arise from different etiologies, most patients will need a personalized approach to be successfully treated. Although PGAD is a scarce condition, the importance of a multidisciplinary approach should be emphasized. In cases where initial treatments fail, comprehensive consideration and treatment of comorbid psychiatric conditions may be required.

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