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A Case of Spontaneous Ejaculation Associated with Panic Disorder Which was Treated with Sertraline and Alprazolam

Guliz Senormanci[1], Osman Hasan Tahsin Kilic[2], Omer Senormanci[1]

ABSTRACT:

A case of spontaneous ejaculation associated with panic disorder which was treated with sertraline and alprazolam

Anxiety may coincide with sexual arousal. Same sympathetic and parasympathetic pathways involving in both conditions may be responsible for this coincidence and anxiety and sexual arousal have similar physiological features. In this case report, we present a 20 year old male patient experiencing spontaneous ejaculations that occur without a prior sexual arousal, and without erection during panic attacks. The ejaculations were not reported to be pleasurable and the content of though included thoughts of guilt due to spontaneous ejaculations. The patient recovered from both panic attacks and spontaneous ejaculation after receiving pharmacological treatment.

Keywords: spontaneous ejaculation, panic disorder, sertraline

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[1]University of Health Sciences Bursa Yuksek Ihtisas Training and Research Hospital, Bursa - Turkey
[2]Zonguldak Atatürk State Hospital, Zonguldak - Turkey

Corresponding Author:
Omer Senormanci,
University of Health Sciences Bursa Yuksek Ihtisas Training and Research Hospital, Bursa - Turkey

E-mail address:
senorman_7@hotmail.com

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INTRODUCTION

Anxiety may coincide with sexual arousal. Same sympathetic and parasympathetic pathways involving in both conditions may be responsible for this coincidence and anxiety and sexual arousal have similar physiological features (1). Although there are conflicting evidence regarding sexual dysfunction associated with panic disorder (PD), associations between high levels of anxiety in PD patients and particularly sexual aversion and premature ejaculation have been suggested (2). Even though there is a well-known association between panic disorders and premature ejaculations, only one case of spontaneous ejaculation during panic attacks was reported in the literature (3). A patient experiencing spontaneous ejaculations during panic attacks and who recovered from both panic attacks and spontaneous ejaculation after receiving pharmacological treatment was presented in this case report.

CASE PRESENTATION

A 20 year-old university students complained of experiencing panic attacks that started with palpitations, pounding heart, shaking hands, a feeling of suffocating that turned into an intense episodic anxiety. His complaints started 2 months ago but became more frequent during the last one month. The day before his admission to the psychiatry outpatient clinic, he visited emergency service thinking he was having a heart attack and he was referred to the psychiatry outpatient clinic, after being examined and tested for a heart attack. During the psychiatric interview, he stated that eight of the panic attacks he experienced during the last two months were

associated with ejaculations. He said that ejaculations occurred without a prior sexual arousal, without erection, and were not pleasurable. The thought content included thoughts of guilt due to spontaneous ejaculations. Psychiatric assessments revealed a Panic and Agoraphobia Scale score of 21, a Hamilton Anxiety Rating Scale score of 27 and a Hamilton Rating Scale for Depression score of 8. He had no history psychiatric admission. He said that in the past, his face used to turn red and his hands used to tremble in his encounters with strangers particularly with the opposite sex. Although these symptoms were resolved in time, he had a history of panic attack during a folk dance performance when he was fourteen and a spontaneous ejaculation had occurred while he was experiencing a high level of anxiety. Physical examination and neurological examination of the patient were unremarkable. Complete blood count, thyroid functions test results, routine blood chemistry and blood vitamin B12 and folate levels were within normal limits. He was seen by an urologist and urologist exam was unremarkable. The patient was diagnosed with panic disorder and started on sertraline 50 mg daily and alprazolam 0.5 mg twice a day. In the follow up visit one month later, panic attacks and spontaneous ejaculations were gone, however he was avoiding making long journey on a bus and the anxiety expectation persisted. Sertraline was titrated to 100 mg and alprazolam was discontinued. Next month, psychiatric evaluation of the patient revealed a Panic and Agoraphobia Scale (4) score of 5, a Hamilton Anxiety Rating Scale (5) score of 8 and a Hamilton Rating Scale for Depression (6) score of 4 and remission was achieved without further drug-related sexual complaints. In the Month 6 follow-up visit, therapeutic gains were preserved.

DISCUSSION

Ejaculation is under the control of the central nervous system (CNS). Descending spinal noradrenergic pathways and noradrenergic sympathetic innervation of the genital area stimulate ejaculation while descending serotonergic pathways have an inhibitory effect on ejaculation (7). Ejaculatory centers of the CNS exert their inhibitory and excitatory effects through serotonergic and dopaminergic pathways. Stimulation of 5-HT 1A receptors causes ejaculation while stimulation of 5-HT 1B and 5-HT 2C receptors causes its inhibition (8). Alpha receptor blockers inhibit ejaculation both centrally via serotonergic and dopaminergic effects and peripherally by reducing the sympathetic tone of the seminal canal (9).

Erection may be inhibited in cases of anxiety, when the parasympathetic activity is increased while ejaculation which is under the sympathetic and adrenergic control may occur (1). In PD patients, it has been demonstrated that sympathetic activity is normal apart from panic attacks, while adrenalin release is increased during attacks (10). Increased sympathetic activity is associated with increased dopamine and norepinephrine activity and decreased serotonergic activity (11). Therefore, similar mechanisms play a role in spontaneous ejaculation and in anxiety disorders such as panic attacks.

In our patient, the occurrence of an ejaculation without any prior sexual arousal and without erection in a performance anxiety and during panic attacks in the last two months suggested spontaneous ejaculations. In addition, our patient was experiencing feelings of guilt following ejaculations. The addition of sertraline, a selective serotonin re-uptake inhibitor (SSRI), to the treatment, resulted in the resolution of panic attacks as well as spontaneous ejaculations. 5-HT 2C hyposensitivity that has been blamed in the pathophysiology of premature ejaculations and 5-HT 2C receptor desensitization caused by SSRIs has been assumed to contribute to the inhibition of ejaculations (12).

A patient experiencing panic attacks associated with spontaneous ejaculations who was treated with another SSRI, citalopram, and clonazepam was reported in a case presentation and panic attacks were resolved simultaneously with spontaneous ejaculations. In both cases, it is not clear whether spontaneous ejaculations resolved subsequently to the resolution of anxiety following the treatment or spontaneous ejaculations resolved as a result of the effects of SSRI on serotonin and further studies are needed (3).

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