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Case Report

Sexsomnia in a patient with lichen planopilaris and pulsed corticosteroid prescription

Running Title: Sexsomnia

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Abstract

Sleep sex or sexsomnia is a relatively new disease that is considered an unusual sexual experience and behavior. Many facts about sexsomnia, including its causes, symptoms, and exact prevalence, are still unknown. Given that the symptoms of the disease occur accidentally during the night, it is tough to study this disease in the long run. This study reported a case of a 30-year-old man with sexsomnia who had no recollection of the sexual behavior he exhibited while asleep.

He had lichen planopilaris and was not receiving any psychiatric medication at the time of the study. However, he was under treatment with corticosteroids for six months, which eventually worsened his depression. This behavior attracted his wife's attention, and he was referred to a doctor due to infertility.

Keywords: Sexsomnia; Lichen planopilaris; Sleep; Corticosteroid treatment

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Introduction

Sexsomnia is a sleep-related disorder that can occur at different stages of sleep. It is defined as being engaged in sexual acts, such as masturbating while sleeping (1). Many facts about sexsomnia, including its causes, symptoms, and exact prevalence, are still unknown. Sexsomnia is a relatively new condition, with the first reported case in 1986.

Exact information about the prevalence of this disease is not yet known, but it is considered a rare disorder. According to a study done in 2015, there were only 94 cases of sleep sex worldwide. Another research was performed on patients with sleep disorders in a Canadian clinic, and it was found that merely 8% of patients had sexual symptoms. The prevalence of sexsomnia is almost three times higher in men than women. On the other hand, among sexual behaviors, masturbation is more common in women (2).

In the following, symptoms of sexsomnia are elaborated:

- Caressing themself or a person next to them
- Moaning
- Increase in breathing and heart rate
- Sweating
- Masturbating
- Movement of the pelvis in a way that is common during sex
- Clinging to the person next to themself, and trying to have sex with them
- Reaching orgasm alone
- Having no recollection of the sexual behavior after waking up
- Blank or glassy stare during events
- Not reacting to what happens around them during sex
- Inability or difficulty waking during events
- Denial of activities during the day when the patient is fully conscious (3).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM 5), sexsomnia is a sleep disorder. People with sexsomnia may also have other sleep disorders, such as sleepwalking or talking (4). This disorder is classified in ancient scientific sources as a non-Roman sleep disorder. Some of the causes of sexsomnia including insomnia, severe fatigue, high stress, excessive alcohol consumption and drug use, anxiety, unsuitable environmental conditions (light, noise, or temperatures that are too warm), lack of sleep hygiene, stressful jobs such as working in a hospital or military center, travel (due to disturbed sleep hours), some specific medications, and a history of other types of sleep-related disorders (5).

Case presentation

Our case was a 30-year-old man who was married, right-handed, infertile, and childless. He referred to various reproductive endocrinologists within the previous two years. During this time, he had sex with his wife almost twice a month, which was rare for both parties. In their first four years of married life, they were satisfied with their emotional and sexual relationships. Moreover, the patient had no history of premature ejaculation, extramarital affair, and a new marital conflict or discord with his wife. They were not worried

about getting an incurable disease, but they were always worried and anxious to receive bad news.

His wife said, "*Since two years ago, he has been waking up some nights and unexpectedly tried to have sex, and at that time he seems violent and startled, but the next morning, he does not say anything about last night's relationship*." The patient did not have an obsessive-compulsive or psychotic disorder.

Three and a half years before the study, the patient was diagnosed with lichen planopilaris and developed depressive symptoms. He was not receiving psychiatric medications at the time of the study, but he was under treatment with pulsed corticosteroids for six months, which worsened his depression. However, his wife supported him during these years, which reduced his depressive symptoms.

Following urological examination, it was found that there was abnormal morphology in 75% of his sperms as a cause of infertility, and the couples were a candidate for IVF.

Discussion

The first official case of sexsomnia was reported in 1986 (6). Given that the symptoms of the disease occur accidentally during the night, it is tough to study this disease in the long run. People with sexsomnia do not even know they are sick. So, they do not report it. On the other hand, people who have experienced the symptoms of this disorder are usually reluctant to report it because they feel ashamed. That is why it is difficult to get real statistics from people with this disorder.

Sexsomnia and related sexual behaviors during sleep may be diagnosed in people who have been charged with a sexual offense (7). Although the disorder is now officially recognized in the DSM5, it can pose challenges for forensic assessors and legal professionals due to the variable presentation of such behaviors as well as the potential for abuse in medical situations (8).

Sexsomnia, on the other hand, is difficult to diagnose and may be confused with other diseases. The patient may experience palpitations and shortness of breath with sweating at the onset of the disorder. An Electroencephalography (EEG) film is recommended instead of epilepsy or other sleep disorders in these patients to prevent misdiagnosis. If there are waves of epilepsy, the necessary measures should be taken to treat epilepsy. Otherwise, the patient is very unlikely to develop epilepsy.

Excessive stress and anxiety are among the causes and exacerbations of this disease (9). Our patient had severe periodic stress and anxiety due to a combination of stressors, infertility problems, and reduced number of sexual intercourse with his wife. He also suffered from lichen planopilaris, which could significantly impact the onset of his disease.

Considering that this disease has been recently classified medically, no standard diagnostic method has been suggested yet. A physician specializing in sleep medicine may diagnose the symptoms of sexsomnia by examining a person's medical history and asking questions about symptoms. However, video polysomnography (vPSG) is considered to be the most acceptable

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method for diagnosing sexsomnia. There is limited statistical information and few reported cases about sexsomnia, and there are many studies on the relationship between sleep and stress. There is also a direct link between stress and cortisol levels in the body. Therefore, poor sleep can be associated with an increased risk of cardiovascular disease, diabetes, hypertension, mortality, obesity, pain, neurological dysfunction, and significant mental disorders (10). Accordingly, it can be hypothesized that corticosteroids can affect the body by affecting the amount and quality of sleep and causing neurological and psychological disorders as well as sleep disorders, such as sexsomnia. However, more studies are needed in this area. The findings of this study may increase the attention of endocrinologists, internists, and neurologists in prescribing corticosteroids to these patients and taking into account the history of corticosteroid use. Specialists should also be careful in prescribing corticosteroids to these patients.

Conclusion

Based on the findings of this study, it can be concluded that specialists should know about sexsomnia and consider epilepsy in the differential diagnosis of sexsomnia. In addition, the administration of corticosteroids in these cases should be done with caution, and the prescribed drugs for these patients should be fully investigated.

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