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Sexsomnia and sleep eating secondary to sodium oxybate consumption☆

Sexsomnia y trastorno de alimentación relacionado con el sueño secundario a oxibato sódico

Dear Editor:

In a recent article, Ariño et al.[1] reported 4 cases of sexsomnia, a parasomnia associated with confusional arousals during non-REM (NREM) sleep. Sexsomnia (sleep-related abnormal sexual behaviours) has been included in the most recent version of the International Classification of Sleep Disorders (ICSD-3)[2] as a subtype of parasomnia.

Some of the actions considered to fall under this category are violent or prolonged masturbation, sexual harassment and/or assault (of minors or adults), initiation of sex (irrespective of the menstrual status of the bed partner), and loud vocalisations, often sexual in nature, while sleeping. The fundamental characteristic of this disorder is amnesia in regard to the episode the next morning or if the patient wakes up during the event. Episodes tend to occur in or near bed or wherever the patient sleeps; sexomnia is rare among patients with sleepwalking who leave the bed or bedroom.

Such parasomnias as somnambulism,[3] sleep-related eating disorder,[4] and catathrenia[5] have been described as side effects of sodium oxybate (SO) in the treatment of narcolepsy.

We report the case of a patient who presented sexsomnia and sleep-related eating disorder secondary to treatment with SO, an association which has not been described in the literature to date.

The patient was a 41-year-old woman with a diagnosis of narcolepsy with mild cataplexy. We initiated treatment with modafinil in increasing doses up to 300 mg/day; as the patient showed no response, she was treated with SO (4.5 g divided into 2 nightly doses), adding modafinil on request (100-150 mg). The reaction to this therapy was positive and our patient has since been able to lead a completely normal life: she started to work as a substitute teacher while studying for state qualifying exams. Two years after treatment, the patient had an episode of self-limiting confusional arousal as a result of taking 4.5 g of SO in a single dose. However, treatment was not suspended.

A few months later, the patient reported sleep-related sexual episodes. At that point she had been taking 4.5 g of SO nightly for 1 year and 11 months. After taking the second dose of 2.25 g of SO, between 2.5 and 4 hours after the first, she sexually assaulted her bed partner (her husband), although she remembered nothing about it the next day. Her husband told her that she behaved strangely and aggressively; this behaviour was mostly accompanied by unintelligible sleep talking, but when her speech could be understood it was largely obscene. The sex act was only occasionally consummated; other times, after the sexual assault, the patient jumped out of bed and went to the kitchen, opened the refrigerator, and voraciously ate whatever she found there, although she showed a preference for carbohydrates.

She consumed no alcohol, drugs, or other medication either before or during the period during which these episodes occurred.

The sexsomnia and sleep-related eating disorder lasted for 3 weeks, after which SO treatment was temporarily discontinued resulting in immediate cessation of symptoms. SO treatment was slowly reintroduced and symptoms did not reappear.

Confusional arousal disorders during NREM sleep are often accompanied by disinhibition of such primitive behaviours as eating, having sex, or aggressiveness. Tassinari et al.[6] proposed the hypothesis of a central pattern generator. These pre-established patterns of behaviour (whether eating, sexual, or defensive behaviour) are normally inhibited by the prefrontal cortex during wakefulness. Confusional arousal disorders are thought to be caused by a number of factors including a dissociation between different brain regions, activation of the central pattern generator, sleep inertia, and sleep-state instability.

In our view, SO may have the side effect of confusional arousals (including sexsomnia) probably due to the increase in slow wave sleep (stage 3 of NREM sleep).

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☆ Please cite this article as: Gomis Devesa AJ, Ortega Albás JJ, Denisa Ghinea A, Carratalá Monfort S. Sexsomnia y trastorno de alimentación relacionado con el sueño secundario a oxibato sódico. Neurología. 2016;31:355—356.

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