ELSEVIER

Sleep Medicine 5 (2004) 151–154

SLEEP MEDICINE

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Case report

A case of marital discord and secondary depression with attempted suicide resulting from REM sleep behavior disorder in a 35-year-old woman

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Received 18 March 2003; received in revised form 3 September 2003; accepted 3 September 2003

Abstract

A 35-year-old woman with childhood-onset parasomnia, marked by arm waving with talking and shouting, developed marital discord solely because her parasomnia disrupted her husband's sleep. She became progressively depressed after her husband began to sleep in a separate bedroom, eventually becoming acutely suicidal. There had been no psychiatric history prior to her marriage. An evaluation with a sleep specialist-neurologist and polysomnographic monitoring confirmed the diagnosis of idiopathic REM sleep behavior disorder (RBD). Treatment with clonazepam, 1.0–1.5 mg at bedtime controlled her RBD and she again slept with her husband, which fully resolved their marital discord and her secondary depression.

Keywords: REM sleep behavior disorder; Sleep violence; Parasomnia; Insomnia/sleep disruption; Suicide attempt; Stress; Depression; Marriage dysfunction

1. Introduction

REM sleep behavior disorder (RBD) is a parasomnia involving disruptive and violent behaviors during REM sleep [1]. RBD primarily affects men over the age of 50, although females and all age groups can be affected [1]. Despite the injurious consequences of RBD, marital discord and adverse psychological consequences appear to be uncommon, perhaps because most people with RBD have been married for decades before the onset of symptoms and their spouses understand that parasomnia behaviors are completely uncharacteristic of the waking personality [2]. To our knowledge, no case of marital separation, divorce, or suicidality (in patient or spouse) resulting from RBD has been reported.

Sleepwalking, a NREM parasomnia, can be misinterpreted as suicidal behavior [3,4]. A case of posttraumatic stress disorder (PTSD), recently reported in the wife of a 29-year-old man with sleep terrors, was triggered by a life-threatening episode during which the husband jumped through a second-story window, sustaining major lacerations, and then 'hung onto the roof as his wife screamed at him from the window' [5].

2. Case report

A 35-year-old, married Taiwanese woman presented to a local sleep specialist (S.-B.Y.) because of disruptive and violent behavior during sleep. Her sleep history dated back to childhood, with the onset of longstanding sleeptalking, episodic screaming, and nightmares limited to childhood. During her adolescence, a sibling observed recurrent episodes of left and right arm waving associated with sleeptalking/shouting. These events usually occurred several hours after sleep onset, never within the first hour, and were not associated with dreaming or falling out of bed. There was no history of hypnagogic or hypnopompic hallucinations, restless legs, sleep paralysis, enuresis, cataplexy or daytime sleepiness.

One year prior to referral, she was married for the first time (to a Taiwanese man who managed a stockbrokerage), and shortly thereafter her husband started to quarrel with her because she often punched his face during sleep, usually while sleeptalking in an urgent and angry manner. When he

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doi:10.1016/j.sleep.2003.09.008

awakened her and asked why she was punching him she could not answer, having no recall of her sleep behaviors or of any dreaming.

In search of sound sleep, her husband began to sleep in a separate bedroom 6 months after their wedding, and 6 months prior to consultation. The patient 'felt guilty', became concerned that her marriage was in a 'crisis', and sought medical attention for her sleep problem. She was evaluated and treated by four psychiatrists. (Physicians in Taiwan generally believe that sleep complaints should be evaluated and managed by psychiatrists (S.-B.Y., personal observation).) She was diagnosed with parasomnia and depression and was prescribed clonazepam (0.5 mg at bedtime) and paroxetine (20 mg daily), which partially controlled the arm movements and talking during sleep, but not sufficiently to allow her to sleep with her husband.

Although they continued to sleep in separate bedrooms, she routinely went to her husband's bed every night before returning to her bedroom to sleep. The patient considered bedtime intimacy and regular sexual relations with her husband to be an 'important and joyful' aspect of her marriage. One night, the patient found the door locked when she went to her husband's bedroom (he later told her that it was a mistake). She felt 'sad and lonely' and ruminated on why her marriage had deteriorated to the point where she could not have bedtime intimacy with her husband. She became suicidal and impulsively ingested excessive amounts of paroxetine and clonazepam. Her husband found her in her bed the next morning, unresponsive, and she was promptly brought to the hospital.

Although she was fully recovered when she returned from the hospital, her husband told her that their marriage was in jeopardy because they could not sleep together due to the fact that his sleep had been frequently disrupted by her sleep behaviours. He worked long hours and when sleeping with his wife had not obtained the restful sleep needed to keep up his busy schedule. She became increasingly depressed, knowing that her sleep problems caused her marriage to be in 'deeper crisis'. She was then referred to another psychiatrist for further sleep evaluation. Secondary depression was identified to be caused by her sleep disorder. On her own, she then presented to a trained sleep specialist-neurologist (S.-B.Y.).

The patient completed a comprehensive sleep questionnaire that was reviewed during the initial consultation. There was no history of head trauma, loss of consciousness, or altered states with automatic behavior. She emphasized that the only problem with her marriage was her sleep disorder. Otherwise, they were financially well off and lived independently from their parents. She had a Master's Degree and worked as an accountant. She reported that her childhood 'went smoothly'. She grew up in a military family. She denied any history of physical or sexual abuse, or of any alcohol or drug abuse. There was no family history of sleep or psychiatric disorders.

Physical examination, including neurologic exam, was unremarkable. She was an outgoing woman who did not appear depressed or emotionally labile.

The patient then underwent two consecutive nights of polysomnographic (PSG) monitoring that utilized standard recording and scoring methods [6], and a seizure montage with fast recording speeds. There was simultaneous audio-visual recording during PSG monitoring. She had discontinued all medications for 1 month prior to her PSG monitoring. (There was a severe sleep lab adaptation effect during the first PSG study: <3 h sleep; no REM sleep.)

During the second PSG study the patient exhibited intermittent augmentation of electromyographic (EMG) tone and excessive phasic EMG twitching during REM sleep. During the first two (of four) REM sleep periods there were three behavioral episodes consisting of frequent bilateral arm waving, leg movements and brief vocalizations, unaccompanied by EEG seizure-like activity or dream recall. The figure illustrates one such episode during REM sleep. Total sleep time, 6.75 h; REM sleep, 19.7%; stage 2, 61%, stage 3/4, 1.3%. Stage 3/4 was greatly reduced and stage 2 moderately elevated. There were no episodes of snoring, apneas/hypopneas, oxygen desaturations, periodic breathing, periodic limb movements, or precipitous arousals during the PSG study (Fig. 1).

A magnetic resonance scan of the brain was normal. She was diagnosed with idiopathic RBD. Clonazepam, 0.5 mg at bedtime was resumed (with the option of eventual dose increase) and she was advised to sleep in the bedroom with her husband, but in a separate bed. A local physician in her own city monitored the patient, who lived several hours away, until follow-up 1 year later, during which time she had been taking clonazepam 1.0–1.5 mg qHS. The higher doses of clonazepam resulted in nearly complete control of her RBD, allowing the patient and her husband to resume sleeping in the same bed (albeit larger than their previous bed); the marital problem was resolved, as well as her depression. A month before the 1-year follow-up, the patient's husband encouraged her to discontinue taking clonazepam, since she had been sleeping so well and they wondered whether she needed to remain on therapy. Within a few nights, problematic RBD behaviors reemerged and she was encouraged to resume clonazepam therapy, which had been well tolerated apart from morning 'dizziness' experienced with a bedtime dose of 1.5 mg.

3. Discussion

This case appears to represent the first report of a suicide attempt directly related to RBD; marital discord emerged (apparently exclusively) due to the RBD behaviors, resulting in secondary depression and the eventual suicide attempt. It seems clear that RBD was specifically implicated in the evolving 'marital crisis'. From the beginning of their marriage the husband of this 35-year-old woman had made

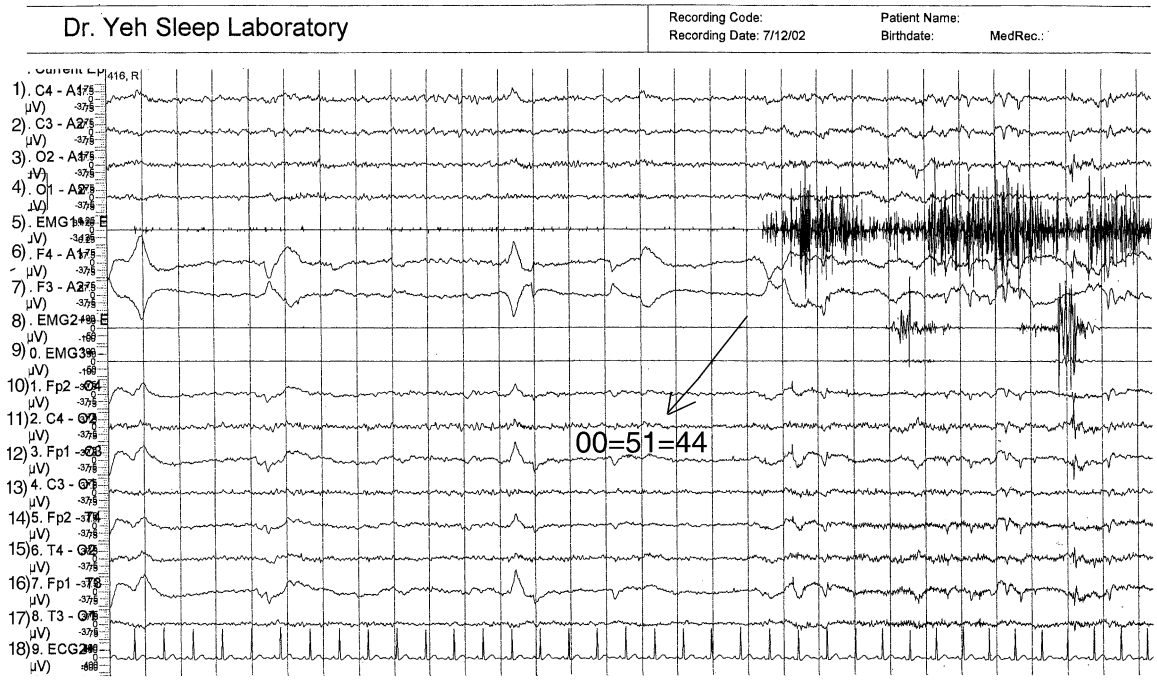

Fig. 1. Nocturnal PSG (60 s epoch) during the first REM sleep period and the emergence of a behavioral episode. Prominent bilateral arm waving is recorded on videotape during the time that the submental EMG (channel 5) demonstrates elevated tone with excessive phasic twitching. Leg EMGs (ant. tibialis; channels 8–9) display minimal twitching during most of this interval. Typical REMs are present (channels 6–7). EEG montage (channels 10–17) detects no seizure activity and shows typical REM sleep tonic activation. The electrocardiogram (channel 18) does not show an increase in heart rate during motor activation with behavioral release.

repeated comments about her disruptive sleep behaviors, which prevented his needed rest, sometimes hurt him and prompted his decision to sleep in a separate bedroom. The couple felt quite compatible in their marriage, the wife's RBD being the only stressor. She did not have a past history of mood or other psychiatric disorder prior to marriage.

Clinicians should thus be aware of the potential severity of marital friction and the secondary problems (depression and suicidality) that may result from the disruptive and harmful effects of RBD on the spouse's sleep. These considerations may particularly apply to young adults and those early in their marriage, whose partners and spouses may not fully realize that the parasomnia behavior is completely out of character from the waking personality. Even when a disruptive parasomnia such as RBD is controlled with treatment, marital or individual counseling may be indicated to resolve any lingering issues. Clinicians should also be aware that $>10\%$ of patients with chronic RBD do not report a history of altered dreaming or of dream-enacting behaviors [7]. RBD patients without dream recall usually have cognitive impairment, as seen with dementia. Therefore, this RBD patient is quite atypical in having no documented cognitive impairment or reported dream-enacting behavior. Her case illustrates that dream-enactment is not necessary for a diagnosis of RBD. On the other hand, at least five other parasomnias can present with dream-enacting behaviors (sleepwalking, sleep terrors, obstructive sleep apnea, nocturnal seizures, nocturnal dissociative disorder), indicating that PSG with simultaneous audio-visual recording is required for the evaluation of parasomnias in adults [1].

The absence of autonomic nervous system activation (e.g. lack of increased heart rate) during motor activation and behavioral release is typical for RBD [1], in contrast to sleep terrors and nocturnal frontal lobe epilepsy, which are characterized by rapid autonomic activation from NREM sleep. The ongoing parasomnia history in this case report is more typical for RBD than for nocturnal frontal lobe seizures, which often recur in clusters [8]. RBD is typically controlled with clonazepam, whereas frontal lobe seizures are usually controlled with carbamazepine.

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