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Sleepsex: A Variant of Sleepwalking

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Sexual acts performed by a sleeping subject have been rarely reported. Two cases are now presented involving sexual behavior performed while asleep. The first case involves the hitherto unreported association of sleepsex with sleepeating. The second case concerns a rarely reported act of sexual battery by a known sleepwalker, and the use of somnambulism as a legal defense. Sexual behavior in sleep may be pleomorphic and more common than realized in both the patient and normal populations.

KEY WORDS: sleepsex; sleepeating; sleepwalking.

INTRODUCTION

Sexual activity performed by a sleeping subject has been rarely reported. Two cases are now described, one case involving a patient with a history of a sleep-related eating disorder allied with prominent sexual behavior in sleep, the second concerning a sexual assault performed by a somnambulist while ostensibly asleep.

CASE 1

A 43-year-old male suffered from nightly episodes of eating in his sleep, as well as prominent sexual activity while asleep for approximately the past 20 years. The patient himself was entirely unaware of these events, the complaints being articulated by his girlfriend of the past 2 years, as

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well as by other sleep partners in the past. His present sleep partner first became alarmed when she realized one night that while having intercourse in their darkened bedroom that the patient was snoring loudly. She then was able to document nightly episodes occurring generally once a night, 7-nights-a-week of the patient initiating sex, the sexual activity lasting as long as 30 min, orgasm and ejaculation achieved, and the patient being entirely amnestic for the events in the morning. It was also their custom to have intercourse upon the final awakening in the morning with the patient in a conscious state.

The repertoire of unconscious sexual activity by the patient was varied and included intercourse in different body positions, as well as oral sex, both given and received. The girlfriend was emphatic in her insistence that the patient's sexual manner and style while asleep were different from his waking behavior, the patient being more aggressive and dominant than was his custom while making love in the awake state. She also remarked that some of the activities exhibited by the patient such as forceful albeit playful biting and "talking dirty" occurred only when he was asleep. She realized that such sleepsex was "a little kinky and probably not normal," nonetheless she requested that the patient incorporate some of the nighttime sexual practices such as biting into their conscious daytime lovemaking. Although she found some aspects of the sleepsex pleasurable, it was both her and the patient's shared initial desire that this activity be evaluated in a medical setting, its cause determined, and the condition treated if possible.

The eating while asleep was also described by the patient's girlfriend as a nightly occurrence. The patient would arise from bed, and with eyes open yet still apparently "asleep," he would go to the kitchen. He would not cook or prepare food in an elaborate manner, but instead would eat large quantities of such food stuffs as candies, cookies, dairy products, or other edible items that were readily available, without utensils. He commonly brought food back to bed, and would sometimes attempt to feed his girlfriend. Although the sleepeating often preceded subsequent lovemaking, this was not an invariable association.

Infrequent episodes of less well defined complex motor behavior would also occur in sleep, described by the sleep partner-girlfriend as "sleepwalking." The patient would occasionally arise from bed, wander aimlessly for several minutes about the room in an unresponsive manner and usually return to bed.

The sleepsex, sleepeating, and sleepwalking all typically occurred in the first half of the night There were no clear daytime precipitating events that appeared related to the sleepsex–sleepeating–sleepwalking, nor was there any temporal clustering, periodicity, seasonal predilection, or remissions in the context of vacations. There was no history of childhood para-

somnias such as sleepwalking–night terrors or enuresis. The patient had never injured himself or others during the sleep episodes nor was there any history of prior criminal conduct, fetishistic or paraphilic behavior, significant psychopathology such as depression, a thought disorder, sexual abuse, posttraumatic stress syndrome, or an eating disorder. (The patient had originally been referred to the Sleep Medicine Clinic by our Department of Psychiatry, who had not encountered any significant psychopathology in a formal psychiatric interview and consultation.)

The patient was a college graduate, described himself as heterosexual, had a stable job experience lasting 15 years as an administrator responsible for the supervision of many employees, and described himself as generally optimistic and happy. His general health was excellent, and he denied any serious past illness of a neurological or other nature He did snore loudly but denied excessive daytime somnolence, witnessed apnea, or choking-gasping episodes during sleep. There was no family history of significant sleep or other illness. He drank alcohol on an infrequent social basis, did not use medication on a regular basis, nor did he abuse illicit drugs.

The patient was mildly obese. His physical examination—including a detailed neurologic and psychiatric examination—was unremarkable. A polysomnogram was scheduled but canceled after the patient decided he wished to defer further testing or treatment.

CASE 2

A 45-year-old male was referred by our Department of Psychiatry for a sleep medicine evaluation after the patient had been arrested and charged with sexual battery. The patient had a history of idiopathic, childhood onset sleepwalking with persistence into adulthood. His health was otherwise good and he was not known to suffer from any significant medical, neurological, or psychiatric illness. He did not have a prior history of criminal conduct, a sexual disorder, or alcohol-illicit drug abuse. He was heterosexual, happily married, college educated, had a long and stable job experience as a business manager, and had a 14-year-old daughter.

One evening, after retiring to bed at midnight, the patient was arrested at approximately 2 AM after he awoke finding himself in his pyjamas in his living room confronted with a screaming teenage girl. The patient's daughter had invited a teenage girlfriend to sleep over that night. The friend was known to the father with whom she had a superficial and normal relationship. Both the patient's daughter and her friend decided to sleep that evening in sleeping bags on the living room floor. As the patient subsequently learned, after retiring in normal fashion, he had arisen and was

said to have walked downstairs to the living room where he began fondling his daughter's friend who was initially asleep immediately next to the daughter. The event—for which the patient is entirely amnestic—was said to have lasted seconds. The patient expressed bewilderment and guilt, and attempted to explain to both the police who were subsequently called as well as the patient's attorney that the patient and his spouse both believed that he had been "confused and sleepwalking." The patient was visibly distressed while relating the episode to one of the authors. He was particularly concerned that he apparently had received counsel from his attorney to, "Forget about this business of sleepwalking because a jury will never believe you!"

The patient indeed did have a chronic condition of frequent sleepwalking that was recognized and acknowledged by other family members. The sleepwalking occurred several times per month, usually presenting as an isolated single event in the first half of the night, generally consisting of arising out of bed and wandering about the house in an aimless manner, often accompanied by mumbling and incoherent sleeptalking without a terrified affect. The motor activity was not dramatic or violent in nature, and was the subject of humorous derision among family members. The sleepwalking was described by some family members as being occasionally "silly," with the patient, for example, entering a closet and partially dressing or carrying items from one room to another for no apparent reason. The patient was not known to have ever eaten in his sleep. No sleep deprivation, medication or alcohol intake, or stressful event preceded the supposed sexual assault.

The patient did not have any other sleep or medical complaints. His physical examination including a detailed neurologic–psychiatric examination was normal. The formal evaluation by the referring psychiatrist did not uncover any significant psychopathology. He was subsequently lost to follow-up.

DISCUSSION

Sexual acts performed by a sleeping subject have rarely been described. In 1986, Wong described a 34-year old male with nocturnal episodes of masturbation during sleep which the author regarded as a rare "somnambulistic variant." In 1989. Hurwitz *et al.* reported three adult males who had engaged in "sleep-related sexual abuse of children," a report reminiscent of our own Case 2. Buchanan (1991), described a male habitual sleepwalker convicted of indecent exposure that occurred during sleep. Shapiro *et al.* (1996) described a heterogeneous group of 7 patients (6 of whom

were male) who engaged in sexual behavior while asleep. With the exception of one adult male described by Hurwitz *et al.* (1989) who suffered from sleep-disordered breathing (SDB), all of the above patients—including the two cases described in the present report—had a prior history of an allied parasomnia, most commonly that of idiopathic somnambulism. It is our belief that sexual activity in sleep is indeed most commonly a somnambulistic variant, or as Broughton (1968) has described in his classic article, a "disorder of arousal."

It must be noted, however, that somnambulism is itself not a pure nosologic entity, but is instead a descriptive term. Furthermore, the terms "sleepwalking" or "somnambulism " are themselves misleading labels insofar as many subjects do not "walk" per se in their sleep, but may demonstrate a variety of motor behaviors ranging from simply sitting up in bed to more complex behaviors such as running or even driving a motor vehicle. Somnambulistic-like activity may be related to diverse conditions ranging from epilepsy to medication effects. Other conditions that may be associated with or provoke complex motor activity during sleep include SDB which may have been present in our Case 1, as well as one of the cases of Shapiro *et al.* REM behavioral disorder (RBD) is also included in the differential diagnosis of sleepwalking; of interest however, is the absence of sexual activity as a manifestation in human cases of RBD (Schenck *et al.*, 1993), or in an animal model described by Hendricks *et al* (1982)

Sleepwalking may also by associated with psychopathology, prominently with dissociative states (Schenck *et al.*, 1989). However, there has been controversy in the literature regarding the degree to which psychological factors in general are felt to play a role in any given case of sleepwalking. Although Shapiro *et al.* have hypothesized that sexual behavior in sleep "may reveal underlying wishes in a state lacking full consciousness," it is important to note that sexual activity in sleep appears to be a non-REM phenomenon not associated with vivid dreaming and, hence, may not conform to the classical wish-fulfillment function of sleep and dreaming as described by Freud (1900/1955).

Sours *et al.* (1963) in a study of somnambulism among sailors in the American navy, presented a review and summary of the psychodynamic formulation of sleepwalking. He concluded that:

> The adult somnambulist has a disturbed sexual identification, with confusion over masculinity and its relationship to aggressive and sexual activity, which, coupled with fear of passive-feminine strivings, leads to conflicts and fears in regard to aggression and anger. The resultant anxiety gives rise in sleep to wish-fulfilling, symbolic, motoric acts that seek ambivalently to avoid men and demonstrate mastery of the fear of being controlled. Women, on the other hand are not as threatened by oral dependency and passivity, culturally the hallmark of 'femininity,' and do

not respond with somnambulistic motor activity, unless concomitant, masculine, aggressive strivings are also strongly operant.

It is notable, however, that despite a psychodynamic formulation based fundamentally on a sexual conflict, not one of the sleepwalkers described by Sours exhibited any clear sexual manifestation of somnambulism.

It is possible that sexual activity in sleep need not have a clear psychological predicate, a concept akin to the "anti-dream" hypothesis of Crick and Mitchison (1983) which regards dream content itself as fundamentally meaningless. Furthermore the very issue must be raised as to whether sleepwalking in general and sexual behavior in sleep in particular are even occurring strictly in the sleep state. As Crisp *et al.* (1990) have written, "The question remains: are sleepwalkers awake and are they 'conscious'?" It is a difficult task to decide whether unusual behavior *in the sleep setting* represents frank sleepwalking occurring during true sleep, or whether the behavior represents such varied phenomenon as a confusional arousal, nocturnal delirium, sleep drunkenness with automatic behavior, an overlapping mixture of states as in so-called "status dissociatus," malingering, or other volitional, willed behavior. It is the latter consideration that raises the medico-legal implications of occasional cases of unusual behavior in sleep, notably our Case 2.

Mahowald *et al.* (1990) and others (Bonkalo, 1974) have suggested guidelines to assist in the distinction as to whether a criminal act may be related to a genuine underlying sleep disorder as opposed to willful behavior. (See Appendix.) It should be noted. however, that of the relatively few case reports or series in the literature regarding sleep and crime. it is virtually unheard of for the crime to have been primarily sexual in nature (Bonkalo, 1974). In this regard we believe that our Case 2 may represent an extremely rare case in which somnambulism has been used as a defense for a sexual crime (Hurwitz *et al.*, 1989, refer to a "public defender" being involved with their Case 3, Mr G.S.). As is typical in cases where epilepsy has been used as a defense for criminal behavior, the majority of cases of crimes associated with sleep or sleep disorders concern homicide or physical assault of a nonsexual nature (in People v. Szczytko, as reviewed by Treiman (1986), epilepsy was proffered as a defense for a man charged with assault with intent to rape). Hamer and Payne (1993) goes so far as to remark that, "Any reports of sexual arousal generally disqualifies the act of sleepwalking" (as an explanation for criminal behavior), a statement we do not agree with.

A unique twist on the usual concern as to whether an individual's criminal behavior might be explained by a genuine sleep disorder is the report by Hays (1992) regarding four patients with narcolepsy who "falsely but sincerely" accuse *others* of sexual assault. Hays believed that such false

accusations are frequent among narcolepsy patients, and that they are ultimately related to hallucinatory experiences common in narcolepsy.

Case 1 is unique in its combination of sexual activity in sleep associated with sleepeating. We cannot explain this association other than to note that both sex and eating represent obvious appetitive behaviors that are subserved by closely adjacent brain structures, notably in the hypothalamus. Additionally it may be important that sleep-eating is itself a heterogeneous condition that is most commonly associated with sleepwalking followed less frequently by such miscellaneous disorders as SDB and restless legs syndrome (Schenck and Mahowald, 1994). Sexual activity in sleep may be equally heterogeneous, with sleepwalking a common association. Unlike nocturnal sleep-related eating conditions, sexual behavior in sleep appears to be male predominant. Such a male predominance is seen in other conditions such as RBD, SDB, criminal activity associated with sleep, as well as criminal behavior in general, and is thought to possibly reflect hormonal-endocrinologic considerations (Elliott, 1992).

Both our Cases 1 and 2 demonstrate sleep behaviors not characteristic of their waking life. Such a discrepancy between the behavioral repetoire of night and day may be seen in other contexts such as RBD and is typical of criminal activity occurring during sleep in which the illicit act is alien to the usual daytime conduct of the subject. Fifty years ago, Pai (1996), in an article in the British medical literature, remarked that, "A religious and God-fearing man may, during somnambulism, indulge in sacrilegious and profane activities." (Pai also alluded in a single comment to "abnormal sexual practices" he had encounted among the 117 adult male sleepwalkers he had studied.) Such a disparity between waking and sleeping behaviors should not be surprising when one considers, for example, that the dreams of normal subjects may be bizarre and "out of character." As is the case with many elementary biologic functions such as solute handling by the kidney, the profile of any given activity at night may be different from that during the day, different in sleep as compared to wakefulness. It may be reasonable to also expect that more complex behaviors such as the psychology of an individual might also be state-dependent, or influenced by circadian factors. Put in the simplest of terms, the sleeping subject is a different person than the same organism when awake. A kind of normal physiological dissociation takes place, an observation that has hitherto been made to also explain the nature of somnambulism (Gauld, 1992).

Finally, we ask how common is sexual behavior while asleep, what is the spectrum of such behavior, may such activity occur among normal subjects? With regard to the latter query, one set of responses is obvious: We all dream, and our dreams may be overtly sexual in nature. Nondreaming mentation in non-REM sleep also exists and may presumably be sexual as

well (Foulkes, 1967). A particularly dramatic yet common example of a sexual event that occurs during sleep is the nocturnal emission. By extension, it is conceivable that some instances of sleepsex–sleepwalking, like the prevalent parasomnias of childhood, may approximate a "normal" occurrence. Indeed, subsequent to the presentation of the above two cases both within our department as well as at local sleep society meetings, the authors have become aware of examples of sleepsex that have involved colleagues, friends, and family members. These reports are per force anecdotal in nature, involve a non patient population, and do not appear to have been serious to the degree that they caused great concern to the subjects We have not as yet undertaken any systematic inquiry into the prevalence of sleepsex among the normal population.

APPENDIX

The seven specific criteria suggested by Mahowald *et al.* (1990)—all of which are fulfilled by our Case 2—are quoted in abbreviated and edited fashion as follows. Note that with the possible exception of Guideline 1 and its allusion to "sleep laboratory evaluation," the criteria are fundamentally clinical in nature and are made on the basis of history alone. To date, no ultimate biochemical, psychometric, radiologic, neurophysiologic, or other diagnostic marker has ever been conclusively defined nor required for the diagnosis of "somnambulism" (Blatt *et al.,* 1991; Thorpy, 1990).

1. There should be reason (by history or formal sleep laboratory evaluation) to suspect a bona fide sleep disorder. Similar episodes should have occurred previously.

2. The duration of the action is usually brief.

3. The behavior is out of character for the individual, and without evidence of premeditation.

4. The victim is someone who merely happened to be present.

5. Immediately following return of consciousness, there is perplexity or horror, without attempt to escape or to conceal or cover up the action.

6. There is some degree of amnesia for the event.

7. The act may occur upon awakening—usually at least one hour after sleep onset.

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NOTE ADDED IN PROOF

Since acceptance of this article for publication, the authors have become aware of three other recent articles that bear on the subject of sleepsex:

1. Borum, R., and Applebaum, K. L. (1996). Epilepsy, aggression, and criminal responsibility. *Psychiat. Serv.* 47(7): 762-763.

2. Fenwick, P. (1996). Sleep and sexual offending. *Med. Sci. Law*. 36(2): 122-134.
3. Thomas, T. N. (1997). Sleepwalking disorder and *Mens Rea:* A review and case report. *J. Forensic Sci.* 42(1): 17-24.