

Characteristics of Patients With Nocturnal Dissociative Disorders

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Frequency of nocturnal dissociative episodes (NDE) in patients with dissociative disorders (DD) was determined and clinical characteristics of patients with nocturnal dissociative disorders was compared with those DD only. Extensive overnight polysomnographic monitoring with nocturnal video-polysomnography was performed in 8 patients with NDE and 21 patients with DD only. We found a 27.5% prevalence of NDE in patients with DD. A clear transition from one personality to another was observed during sleep in 2 (about 7%) patients. Hallucinations, self-mutilating behaviors during sleep, and violent behavior during sleep were more common in the patients with NDE. Sleep may facilitate the transition from one personality to the other one. Patients with DD may use dissociation as a defense mechanism during sleep. (*Sleep and Hypnosis* 2001;3(4):131-134)

Key words: *sleep/wakefulness dissociation, dissociative disorders, sleep-related violence*

INTRODUCTION

An association between sleep and dissociative phenomena had been considered during recent years. A term proposed by Nemiah (1) "hysterical somnambulistic trance" describes an altered state of consciousness in which traumatic memories return "as a hallucinatory tableau to which react as if it actually existed." Indeed, sleep researchers suggest sleepwalking as "a state of dissociated consciousness in which phenomena of sleeping and waking states combine" (2). Traumatic dreams or nightmares, found in PTSD patients may be also considered as dissociative (3). The

nightmares represent exact replicas or instant replays of the original traumatic experience and are therefore reminiscent of the waking experience of traumatic flashbacks. Dreams may possibly be thought of as dissociative phenomena of a particular type that reflect a monitoring of and reaction to internal and external conditions within the dreamer (4). Thus, it may be suggested that dreams, at least particularly emotionally disturbing ones, have an adaptive function to childhood traumatic events.

Nocturnal dissociative episodes (NDE) usually involve elaborate behaviors that appear to represent attempted reenactments of previous abuse situations. Onset of nocturnal dissociative disorders may be sudden or gradual, and the course is chronic. Affected subjects usually have a history of repeated physical or sexual abuse in childhood that may extend into adolescence and adulthood (5,6). However, frequency NDE and characteristics of patients with NDE were not described, comparing with those DD only, in the literature. The aims of the

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Table 1. Characteristics of 29 Dissociative Disorder Patients With and Without NDE

Characteristics	NDE patients (No=8)		Others (No=21)		z	p
	Mean	SD	Mean	SD		
Age	22.6	5.2	23.1	5.8	0.10	ns
Onset age	19.6	4.7	18.9	4.8	0.17	ns
DES score	36.4	16.6	50.3	21.8	1.34	ns
	N	%	N	%	p ¹	
Marital status						
Married	4	50	9	43		ns
Unmarried	4	50	12	57		
Education						
Less than high school	1	12.5	4	19		ns
High school graduate	5	62.5	8	38		
Some college	1	12.5	1	5		
College graduate	1	12.5	8	38		
Sexual abuse	5	62	16	76		ns
Physical abuse	4	50	8	38		ns
Hallucinations	7	87.5	10	48		<0.05
Self-mutilating behavior during sleep	4	50	0	0		<0.01
Self-mutilating behavior	4	50	14	66		ns
Suicide attempts	3	37.5	8	38		ns
Major depression	4	50	7	33		ns
Borderline personality disorder	1	12.5	3	14		ns
Violent behavior during sleep	8	100	0	0		<0.001
Frequent nightmares	6	75	10	48		ns
	4	50	5	24		ns

¹Fisher exact test

present study were to determine frequency of NDE in patients with DD and to compare clinical characteristics of these patients with those DD only.

METHODS

The subjects were selected from a group of patients at the Clinical Research Program for Sleep and Dissociation in Van City of Turkey. Twenty-nine consecutive patients with DD were evaluated, and 8 of those found to also have NDE. A clinical sleep-wake interview with the patient and his or her bed partner was performed. Extensive overnight polysomnographic monitoring with nocturnal video-polysomnography (after an adaptation night to the laboratory) was performed. The subjects gave written informed consent prior to their participation in the study. We diagnosed a NDE and differentiated from sleepwalking (SW), sleep terrors (ST), and REM sleep behavior disorder according to Schenck and Mahowald’s proposals (6).

The subjects were interviewed by using SCID-D (7). The DES (8) was also administered to the subjects for assessing the frequency of dissociative experiences. The statistical Package for the Social Sciences (SPSS), release 9.05 was used for statistical analysis. Data analyses were performed by using Mann-Whitney U test and Fisher exact test.

RESULTS

The sample comprised 8 (3 male and 5 female) patients with NDE and 21 (2 male and 19 female) patients with DD only. As like the Table 1, hallucinations, self-mutilating behaviors during sleep, and violent behavior during sleep (VBS) were more common in patients with NDE. Of patients with NDE, 2 (25%) had experienced transitions from one personality to another during sleep. These two patients reported a sudden shift of states in the morning. Two (25%) patients with NDE had homicidal acts to their partners during NDE. All of

patients with NDE had VBS and a half of them (N=4) reported self-mutilating behaviors including cutting, burning, hair pulling, and hitting during sleep. There was no significant difference between the groups in the rates of sexual and physical abuse, self-mutilating behavior in daytime, suicide attempts, frequent nightmares and comorbidity with major depression and borderline personality disorder.

DISCUSSION

In the present study, we found a 27.5% prevalence of NDE among patients with DD although the sample was relatively small. A clear transition from one personality to another was observed during sleep in 2 (7%) patients. Most of these patients reported childhood sexual and/or physical abuse. Indeed, virtually all such patients have had histories of childhood abuse, and most also have experienced dissociations during daytime wakefulness (9). When we compared demographic and clinical characteristics, we found hallucinations, VBS, even homicidal behaviors were more common in patients with NDE than other dissociative patients. In a previous study (10), Schenck et al diagnosed 8 cases of nocturnal dissociative disorders presumed SW previously. The women also had daytime states of dissociation and self-mutilating behaviors. In the present study, we found VBS was more common in patients with NDE than other ones. As similar to these findings, In 1989, Schenck et al (11) found 7% of patients with VBS were diagnosed as nocturnal psychogenic dissociative disorders. We also found a half of patients with NDE had self-mutilation during sleep. Self-mutilation is prevalent (23-48 of patients) in DD (12). It was

suggested that the relative lack of pain might represent a special form of isolation or dissociation (13). Our findings suggest that sleep contributes self-mutilation in patients with DD as VBS. On the other hand, the rates of sexual and physical abuse, self-mutilating behavior in daytime, suicide attempts, and frequent nightmares and comorbidity with major depression and borderline personality disorder were not different between the groups.

In the present study, we determined a transition from one personality to another during sleep in two patients. This and previous studies (10,11) suggest that sleep may facilitate the transition from one personality to the other one and the sudden shifts of states that induce the dissociative behavior during sleep, suggest a parasomnia phenomenon. Dissociative mechanisms may intrude upon sleep states as they do waking ones. Indeed, recently, Crisp (14) has suggested that the eruption of SW and ST from deep sleep may be a function of the profound resting state of the forebrain and the associated resting of the usual waking mental defense mechanisms which protect the individual from such experience during normal wakefulness.

As a conclusion, NDE arises from a period of well-developed wakefulness occurring during the sleep period. Other parasomnias arise from sleep, whereas NDE arises from wakefulness. It may be speculated that NDE are a manifestation of wake/sleep state dissociation as well. Patients with DD may use dissociation as a defense mechanism during sleep. NDE or sleep-related dissociative disorders, although not classified as parasomnias in the ICSID, may mimic parasomnias. The term "pseudo parasomnia" may be proposed for NDE that represent dissociated states of sleep and wakefulness.

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