Sleep Paralysis

Sleep Paralysis is a natural bodily function that causes us to be paralyzed during sleep. It prevents us hurting ourselves or others during dreams; however, when it follows us into the waking state it becomes a disorder. Call RBI at 253.299.6556 for an appointment.

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As a college student in 1964, David J. Hufford met the dreaded Night Crusher. Exhausted from a bout of mononucleosis and studying for finals, Hufford retreated one December day to his rented, off-campus room and fell into a deep sleep. An hour later, he awoke with a start to the sound of the bedroom door creaking open—the same door he had locked and bolted before going to bed. Hufford then heard footsteps moving toward his bed and felt an evil presence. Terror gripped the young man, who couldn't move a muscle, his eyes plastered open in fright. Without warning, the malevolent entity, whatever it was, jumped onto Hufford's chest. An oppressive weight compressed his rib cage. Breathing became difficult, and Hufford felt a pair of hands encircle his neck and start to squeeze. "I thought I was going to die," he says.

At that point, the lock on Hufford's muscles gave way. He bolted up and sprinted several blocks to take shelter in the student union. "It was very puzzling," he recalls with a strained chuckle, "but I told nobody about what happened."

Hufford's perspective on his strange encounter was transformed in 1971. He was at that time a young anthropologist studying folklore in Newfoundland, and he heard from some of the region's inhabitants about their eerily similar nighttime encounters. Locals called the threatening entity the "old hag." Most cases unfold as follows: A person wakes up paralyzed and perceives an evil presence. A hag or witch then climbs on top of the petrified victim, creating a crushing sensation on his or her chest.

It took Hufford another year to establish that what he and these people of Newfoundland had experienced corresponds to the event, lasting seconds or minutes that sleep researchers call sleep paralysis. Although widely acknowledged among traditional cultures, sleep paralysis is one of the most prevalent yet least recognized mental phenomena for people in industrialized societies, Hufford says.

Now, more than 30 years after Hufford's discovery, sleep paralysis is beginning to attract intensive scientific attention. The March Transcultural Psychiatry included a series of papers on the condition's widespread prevalence, regional varieties, and mental-health implications.

Sleep paralysis differs from nocturnal panic, in which a person awakens in terror with no memory of a dream. Neither does sleep paralysis resemble a night terror, in which a person suddenly emerges from slumber in apparent fear, flailing and shouting, but then falls back asleep and doesn't recall the incident in the morning.

Curiously, although the word nightmare originally described sleep paralysis, it now refers to a fearful or disturbing dream, says Hufford, now at the Penn State Medical Center in Hershey, Pa. Several hundred years ago, the English referred to nighttime sensations of chest pressure from witches or other supernatural beings as the "mare," from the Anglo-Saxon merran, meaning to crush. The term eventually morphed into nightmare--the crusher who comes in the night.

Sleep paralysis embodies a universal, biologically based explanation for pervasive beliefs in spirits and supernatural beings, even in the United States, Hufford argues. The experience thrusts mentally healthy people into a bizarre, alternative world that they frequently find difficult to chalk up to a temporary brain glitch.

Hufford doesn't believe that an invisible force attacked him in his college room or during several sleep paralysis episodes that have occurred since then, but he sees the appeal of such an interpretation. "We need to deeply question 2 centuries of assumptions about the nonempirical and nonrational nature of spirit belief," he says.

Ominous presence
In the past 10 years, psychologist J. Allan Cheyne of the University of Waterloo in Canada has collected more than 28,000 tales of sleep paralysis. According to one of the chroniclers, "The first time I experienced this, I saw a shadow of a moving figure, arms outstretched, and I was absolutely sure it was supernatural and evil." Another person recalled awakening "to find a half-snake/half-human thing shouting gibberish in my ear." Yet another person reported periodically waking with a start just after falling asleep, sensing an ominous presence nearby. The tale continues: "Then, something comes over me and smothers me, as if with a pillow. I fight but I can't move. I try to scream. I wake up gasping for air."

Many who experience sleep paralysis also report sensations of floating, flying, falling, or leaving one's body. The condition's primary emotion, terror, sometimes yields to feelings of excitement, exhilaration, rapture, or ecstasy. "A small number of people, while acknowledging fear during initial episodes of sleep paralysis, come to enjoy the experience," Cheyne says.

It doesn't surprise Cheyne that those who contact him seem to be average, emotionally stable folk. In surveys that he has conducted with large numbers of college students and other volunteers, about 30 percent report having experienced at least one incident of sleep paralysis. Roughly 1 in 50 people cite repeated episodes, often one or more each week. Cheyne regards the sights, sounds, and other sensations of sleep paralysis as hallucinations that share a biological kinship with dreaming.

Cheyne notes work by Japanese researcher Kazuhiko Fukuda of Fukushima University. Fukuda enlisted volunteers who had experienced many incidents of sleep paralysis. In a sleep laboratory, the Japanese team monitored the volunteers, whom they roused at various times during the night to trigger the phenomenon. The researchers found that during sleep paralysis, the brain, suddenly awake, nonetheless displays electrical responses typical of sleep characterized by rapid eye movement (REM).

Two brain systems contribute to sleep paralysis, Cheyne proposes. The most prominent one consists of inner-brain structures that monitor one's surroundings for threats and launches responses to perceived dangers. As Cheyne sees it, REM-based activation of this system, in the absence of any real threat, triggers a sense of an ominous entity lurking nearby. Other neural areas that contribute to REM-dream imagery could draw on personal and cultural knowledge to flesh out the evil presence.

A second brain system, which includes sensory and motor parts of the brain's outer layer, distinguishes one's own body and self from those of other creatures. When REM activity prods this system, a person experiences sensation of floating, flying, falling, leaving one's body, and other types of movement, Cheyne says.

Hufford, however, regards the intrusion of REM activity into awake moments as inadequate to explain sleep paralysis. Dream content during REM sleep varies greatly from one person to another, but descriptions of sleep paralysis are remarkably consistent. "I don't have a good explanation for these experiences," he says.

Pushy ghosts

Psychiatrist Devon E. Hinton has heard his share of terrifying stories. While sitting in Hinton's office in Lowell, Mass., a 48-year-old Cambodian woman recounted two such tales from her own life. The first detailed nearly weekly nocturnal events of a type known among her fellow Cambodians as "the ghost pushes you down." At these times, the woman said, she awakens from sleep unable to move. Three ghastly demons stalk into her room, each covered in fur and displaying long fangs. One of the creatures then leans close to her head; the second holds down her legs; and the third pins down her arms. She told Hinton that when these terrors befall her, she knows that the demons want to scare her to death and she feels that they might succeed.

Her second tale was even more dreadful. She told Hinton that the ghost terrors usually trigger a flashback to an actual incident that occurred more than 20 years ago. Before reaching the United States, she survived the genocidal reign of Cambodian dictator Pol Pot, who directed the slaughter of roughly 2 million Cambodians. On one occasion, the young woman witnessed soldiers escorting into a nearby clump of trees three blindfolded persons, whom she recognized as friends from her village. Soon, she heard the sickening sounds of her friends being clubbed to death.

In his therapy, Hinton, who speaks the woman's Khmer language, asked the woman to establish a connection between
the two sets of stories. She told him that the three demons are the spirits of her three executed friends, who return to haunt her so that she won't forget them. She also related her worries that a sorcerer would make the spirits enter her body, causing insanity, or will instruct the spirits to place objects inside her, causing anxiety and physical illness.

Each ensuing episode of sleep paralysis over the years has intensified the woman's flashbacks, sleep difficulties, and other symptoms of what psychiatrists call post-traumatic stress disorder (PTSD). Hinton says that many Cambodian refugees relive past horrors through sleep paralysis. He notes that few people discuss these incidents with their physicians. "Unless you specifically ask about sleep paralysis, you don't know that a patient has it," Hinton says.

So, Hinton surveyed people at his outpatient clinic in Lowell, which has the second-largest Cambodian population in the country. Of 100 consecutive Cambodian refugees whom Hinton saw as patients at the clinic in 2003, he notes, 42 reported currently experiencing at least one sleep-paralysis episode each year. Most reported seeing an approaching demon or other entity that created pressure on their chests and typically triggered panic attacks. Among the refugees questioned, 45 had been diagnosed with PTSD. Of those, 35 reported being afflicted by sleep paralysis, usually with at least one episode a month.

The Cambodians told Hinton that sleep paralysis permits people who suffer unjust deaths to haunt the living and creates "bad luck." These cultural ideas foster panic attacks, Hinton asserts.

Panic attacks, PTSD, and other mental disorders may indirectly promote sleep paralysis by disrupting the sleep cycle and yanking people out of REM sleep during the night, he adds. Other factors that disturb sleep, such as jet lag and shift work have also been linked to sleep paralysis.

Psychological treatment that delves into the personal meaning of bouts of sleep paralysis reassures sufferers that these encounters aren't signs of physical illness or supernatural visits, Hinton says.

Evidence from Shanghai also supports a connection between sleep paralysis, PTSD, and panic attacks. Albert S. Yeung of Massachusetts General Hospital in Boston and his team interviewed 150 psychiatric outpatients in Shanghai. About one-quarter of these patients had experienced sleep paralysis at least once, and more than half of those with PTSD or panic attacks described incidents of sleep paralysis, according to Yeung.

However, unlike the Cambodian immigrants whom Hinton studied, nearly all of Yeung's Chinese study participants in retrospect regarded the incidents as innocuous. Most had experienced feelings of dread but didn't encounter supernatural creatures.

For African Americans who experience panic attacks, sleep paralysis is also especially common, according to community surveys conducted by psychologist Cheryl M. Paradis of Marymount Manhattan College in New York City. Although 25 percent of the African-American participants reported having experienced sleep paralysis, nearly 60 percent of blacks who had panic attacks said that they regularly experienced sleep paralysis. In contrast, sleep paralysis turned up among only 7 percent of whites who have panic attacks, Paradis says.

High stress levels in African Americans, at least partly the result of poverty and racism, contribute to anxiety, sleep problems, and sleep paralysis, she suggests.

Sexual abuse may also make a person susceptible to sleep paralysis. Harvard University psychologists Richard J. McNally and Susan A. Clancy have found that, among adults who report having been sexually abused during childhood, nearly half describe at least one past episode of sleep paralysis. In their study, only 13 percent of participants who hadn't been sexually abused reported sleep paralysis.

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Alien invaders

There is a kinship between waking nightmares starring Night Crushers and reports of alien abductions, McNally and Clancy find. For more than a decade, they have been studying people who claim to have been abducted by aliens from outer space. McNally and Clancy are convinced that these claims derive from sleep-paralysis hallucinations.
Accounts of space-alien encounters typically begin with the abductee waking in the night while lying face up, McNally says. The person can't move but senses electric vibrations. A feeling of terror makes breathing difficult. Alien beings advance to the foot of the bed or climb on top of the person, who then experiences a sense of floating or of being transported to an alien craft.

Days or weeks later, in response to a therapist's hypnotic suggestions, the abductee may generate details of being sexually probed or otherwise assaulted by the aliens, McNally notes.

Claims of abductions by space aliens trigger much controversy, media attention, and ridicule. The late Harvard psychiatrist John Mack fueled the hubbub by defending the accounts as descriptions of actual encounters with visitors from other planets.

There's another, far more likely, explanation for the reported experiences of the "abductees," says McNally. Traumatic encounters that a person seems to experience during sleep paralysis feel as vividly real as anything that happens during the day does, he notes.

Despite their fantastic claims, these people are mentally healthy, says McNally. "Sleep paralysis is an entirely natural phenomenon," he remarks. "In isolated cases, it's no more pathological than a case of the hiccups."

McNally and Clancy linked the claims of 10 alien abductees to episodes of sleep paralysis. Memories of the scary incidents sparked heart-rate increases and other physiological stress reactions that exceeded those previously reported for Vietnam veterans with PTSD as they recalled distressing combat events.

Even the most rational people who experience sleep paralysis often find it difficult to write off their nighttime ordeals as unreal, Hufford notes. He has interviewed many U.S. medical students who, even after hearing about REM sleep and the brain's threat-detection system, insist that their frightening meetings with the Night Crusher were real. Until sharing their stories with Hufford, most of the students had never told them to anyone.

"I suspect that millions of people in the United States are walking around never having told anybody about having these terrifying experiences," Hufford says.

That's unlikely to change anytime soon, he adds. Scientists and physicians treat reports of mingling with supernatural creatures and spirits as evidence of mental imbalance. And mainstream religions condemn connections with ghosts, demons, and evil presences.

But the world of sleep works according to its own rules. Whether shunned or embraced, Hufford says, the Night Crusher returns with frightening regularity. Some people experienced sleep paralysis in almost all of its forms, from terrors to vibrations and auditory hallucinations to out-of-body experiences. Most often it is completely terrifying, but some may at times be elating.

Others report experiencing manifestations reported by sufferers of sleep paralysis are eerily similar to the visitation of death in "The Snows of Kilimanjaro," written by Ernest Hemingway and first published in Esquire in 1936:

It moved up closer to him still and now he could not speak to it, and when it saw he could not speak it came a little closer, and now he tried to send it away without speaking, but it moved in on him so its weight was all upon his chest, and while it crouched there and he could not move, or speak, he heard the woman say, "Bwana is asleep now. Take the cot up very gently and carry it into the tent."

He could not speak to tell her to make it go away and it crouched now, heavier, so he could not breathe. And then, while they lifted the cot, suddenly it was all right and the weight went from his chest.

So what exactly is sleep paralysis?

Sleep paralysis consists of a period of inability to perform voluntary movements either at sleep onset (called hypnagogic)
or upon awakening (called hypnopompic).

Sleep paralysis may also be referred to as isolated sleep paralysis, familial sleep paralysis, hypnagogic or hypnopompic paralysis.

What are the symptoms?

Sufferers may experience an inability to move the trunk or limbs at sleep onset or upon awakening, episodes of partial or complete skeletal muscle paralysis, which can also be associated with hypnagogic hallucinations or dream-like mentation (act or use of the brain).

Polysomnography (a sleep recording) shows at least one of the following: suppression of skeletal muscle tone; a sleep onset REM period; or dissociated REM sleep.

Is it harmful?

Sleep paralysis is most often associated with narcolepsy, a neurological condition in which the person has uncontrollable naps. However, there are many people who experience sleep paralysis without having signs of narcolepsy. Sometimes it runs in families. There is no known explanation why some people experience this paralysis. It is believed to not be harmful, although most people report feeling very afraid because they do not know what is happening, and within minutes they gradually or abruptly are able to move again; the episode may often terminated by a sound or a touch on the body.

In some cases, when hypnagogic hallucinations are present, people feel that someone is in the room with them; some experience the feeling that someone or something is sitting on their chest and they feel impending death and suffocation. That has been called the ‘Hag Phenomena’ and has been happening to people over the centuries. These things cause people much anxiety and terror, but there is no physical harm.

What else can you tell me about sleep paralysis?

Some people with disrupted sleep schedules or circadian rhythm disturbances experience sleep paralysis. A study found that 35% of subjects with isolated sleep paralysis also reported a history of wake panic attacks unrelated to the experience of paralysis. Sixteen percent of these persons with isolated sleep paralysis met the criteria for panic disorder.

How can I stop the sleep paralysis?

You may be able to minimize the episodes by getting enough sleep every night, reducing stress, exercising regularly (but not too close to bedtime), and keeping a regular sleep schedule (Rx meds can help).