REM Sleep Behavior Disorder

Are You Acting Out Your Dreams?

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REM Sleep Behavior Disorder is a unique and complex condition that is considered a parasomnia. A parasomnia is a grouping of sleep disorders that occur in the state between sleeping and wakefulness and involve unusual and undesirable physical symptoms.

These symptoms can include things like abnormal movements, talking, expressing emotions, or a host of other unusual things. While not necessarily concerning for some who experience parasomnia; it can become problematic when a person with the condition unknowingly causes injury to themselves or others. In fact, parasomnia is often more concerning for the non-affected person who is witnessing the behavior.

There are two main types/stages of sleep – rapid eye movement (REM) and non-rapid eye movement (non-REM); and parasomnias are grouped by the stage within which they occur. REM sleep is the part of the sleep cycle when one's more vivid dreaming occurs, your eyes move rapidly under your eyelids, and heart rate, blood pressure, and breathing increases. This is also the stage of sleep where REM sleep behavior disorder (RSBD) occurs.

What is REM sleep behavior disorder?

REM sleep behavior disorder is characterized by the loss of normal muscle paralysis during REM (rapid eye movement) sleep, leading to the acting out (physical and vocalization) of dreams/nightmares during sleep. Normally, during REM sleep, you do not move or talk; your brain sends signals to inhibit these particular activities. A temporary muscle paralysis - called atonia – while our brains are wide awake with activity (dreams, emotional processing, etc). For those with RSBD this temporary paralysis is impaired, leaving them to act out their vivid, action-packed, and/or violent dreams/nightmares. This can range from simple limb twitches and whispers to hand gestures and talking to more violent grabbing/kicking and shouting/swearing. Individuals with REM Sleep Behavior Disorder may even jump up or fall out of bed. These behaviors can have a significant impact on sleep and pose a serious risk – not only to oneself but to anyone they share a bed with. In fact, up to 90 percent of spouses of those with REM sleep disorder report having sleep issues and over 60 percent have experienced a physical injury[1].

It is important to note that individuals are NOT aware of these behaviors during the episode. They often find out when told by a sleep partner/housemate or when they wake up with an injury or injuries. Individuals experiencing an RSBD episode can typically

be woken up fairly easily and are alert, coherent and able to recall the content of the dream/nightmare.

The frequency of RSBD episodes can very – a few times per year or every night, once per night or multiple times; and, unfortunately, symptoms typically worsen over time.

How does Parkinson's fit in?

While REM Sleep Behavior Disorder is relatively rare; it is more common in men and adults over 50 – which is where one of the correlations between RSBD and Parkinson's can be noted. Not only is the biggest risk factor for Parkinson's aging; research has also shown RSBD to be "disproportionately prevalent" in Parkinson's, with estimates ranging from 33-47%[2]. Another correlation of note is the research that suggests individuals with RSBD are at an increased risk of developing Parkinson's or other neurological conditions impacting the alpha-synuclein protein in the brain (ie: MSA, DLB); with many Parkinson's patients experiencing RBSD symptoms prior to their Parkinson's diagnosis

The exact mechanisms underlying the relationship between RSBD and Parkinson's are not fully understood, but it is believed that both conditions share common systemic processes. The abnormal accumulation of alpha-synuclein in specific brain regions, including the brainstem, is a hallmark feature of both RSBD and Parkinson disease.

How is RSBD diagnosed?

Diagnosing RSBD in people with Parkinson's involves a thorough clinical evaluation, including a detailed sleep history, medical history and may involve a sleep study that monitors brain activity, eye movement, muscle activity, heart rate, and other parameters during sleep. This evaluation aids in the identification of abnormal behaviors during REM sleep.

Managing REM Sleep Behaviour Disorder

Treatment strategies often involve a multidisciplinary approach, including neurologists, sleep specialists, and sometimes psychiatrists. Working to remove dream/nightmare triggers is the first step. Reducing agitating and stimulating things prior to sleep is a great place to start. News, action shows, caffeine and alcohol intake can increase symptoms of RSBD. Your doctor might recommend Melatonin to help aid with sleep and reduce symptoms. Medications such as clonazepam, a benzodiazepine, are commonly prescribed to suppress the motor symptoms associated with REM Sleep Behaviour Disorder. However, the potential side effects and interactions with Parkinson's medications must be carefully considered.

REM sleep behavior disorder in Parkinson Disease represents an intriguing intersection between neurology and sleep medicine. Recognizing and addressing REM Sleep Behaviour Disorder in Parkinson's patients is crucial for improving the overall quality of life for individuals living with these conditions. Ongoing research into correlations between REM sleep behaviour Disorder and Parkinson disease may provide valuable insights into the underlying causes and potential interventions for both disorders.

References

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