

REM Sleep Behavior Disorder as a Prodrome of Neurodegenerative Disorders

Quick Facts:

REM sleep has two distinctive features: dreaming and loss of muscle tone. The loss or dysregulation of REM sleep atonia (paralysis) results in “acting out” dreams, producing involuntary body movements that may pose a risk for injury to those affected, as well as their bed partners. This is the hallmark of REM sleep behavior disorder (RBD). Recent research advancements identify idiopathic/isolated RBD (iRBD) as a potential prodrome of certain neurodegenerative diseases. Between 70% and 91% of patients with iRBD go on to develop some form of alpha synucleinopathy such as Parkinson disease (PD), Lewy body dementia (LBD), or multiple system atrophy (MSA). Conversely, the prevalence of RBD in patients with PD is estimated between 50% and 60%. The prevalence of RBD is estimated to be even higher in those with MSA (>90%) and LBD (>50%). Symptoms of RBD may precede onset of classic symptoms of neurodegenerative disorders by 5-15 years. RBD may appear before the onset of anosmia which has been considered one of the earliest symptoms of these conditions. RBD can also be medication-induced, and is sometimes reversible when provoking medications, such as antidepressants, are stopped.



Are my patients at risk?

“Dream enactment behaviors” are common in patients treated with antidepressants (SSRIs, SNRIs, TCAs); REM sleep without atonia is observed on polysomnography and is required for RBD diagnosis. These behaviors may also occur secondarily to other sleep disorders such as sleep apnea or non-rapid eye movement (NREM) sleep parasomnias. RBD can be seen as a part of narcolepsy, parasomnia overlap disorder, or secondary to other neurologic conditions.

Dream enactment in those with iRBD usually involves violent and injury prone behaviors that are associated with vivid dreams, the content of which is usually recollected if the patient is awoken during or right after the episode. The majority of patients with iRBD are men above the age of 50 years, though this phenomenon is not exclusive to this patient population.

Why It Matters

- Loss of muscle tone and often violent body movements can result in sleep disturbance and injury to the patient or their bed partner.
- Bedroom safety precautions and pharmacotherapy are used to control the symptoms and minimize their impact on patients’ and bed partners’ quality of life.
- RBD may represent a prodrome of one of the forms of alpha synuclein neurodegenerative disorders.

When to Refer?

If iRBD is suspected, refer to a sleep specialist.

What You Can Do

- RBD should be suspected in patients who are observed to “act out” their dreams.
- Diagnosis should be established by history and polysomnography, and ideally upon discontinuation and/or treatment of possible offending culprit (medications, sleep-disordered breathing, etc.).
- Treatment considerations include assuring bedroom safety. Sharp or easily moveable objects should be removed from the bedroom and padding may be applied to the bed and adjacent pieces of furniture. Sleeping in a sleeping bag or on a mattress close to the floor may help assure patient’s safety.
- Medications, including melatonin and clonazepam, may be used to suppress symptoms of dream enactment.
- Risk stratification for development of alpha synucleinopathies (PD, LBD and MSA) should be done on a case-by-case basis. Consider early referral to a sleep neurologist.
- Caregiver and patient may benefit from understanding that RBD behaviors of an aggressive or angry nature are not reflecting hidden relationship conflict, nor will they resolve by scolding the patient. Caregiver support and family management of RBD in the home may help avoid nursing home placement.

Patient Information Website:

- <http://sleepeducation.org/sleep-disorders-by-category/parasomnias/rem-sleep-behavior-disorder/overview-facts/>

References:

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