

REM SLEEP BEHAVIOR DISORDER

Parasomnia characterized by dream-enactment behaviors that emerge during a loss of REM sleep atonia.

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EPIDEMIOLOGY

- **Prevalence= approximately 0.5 to 1.25% in the general population and approximately 2% in older adults.**
- **Among younger adults (<40 years old), RBD most commonly occurs with antidepressant medications or in the setting of narcolepsy.**
- **In children, most cases are associated with narcolepsy type 1, antidepressant medication use, and brainstem tumors or neuropsychiatric disorders.**

PATHOGENESIS

- **Normal= dream during REM sleep >>>> paralysis of skeletal muscle**
- **In both spontaneous and medication-induced RBD, the loss of REM sleep atonia is related to dysfunction of subcoeruleus complex in the pons.**

ETIOLOGY

- Alpha synuclein degeneration (Parkinson disease, DLB, etc)
- Non-synuclein neurologic disorders (PSP, frontotemporal dementia, etc)
- Narcolepsy and other state boundary control disorders
- Pontine lesions (vascular, demyelinating, neoplastic, traumatic)
- Medications (serotonin antidepressives)

CLINICAL FEATURES

- Dream-enactment behaviors=sleep-related vocalization and/or complex motor behaviors during REM sleep, correlating with dream mentation.
- Movements are short in duration (less than 60 seconds) and appear purposeful.
- Symptoms occur predominantly in the second half of the sleep period.
- Median age of diagnosis is 60 to 70 years.
- Progressive motor and cognitive features consistent with early neurodegeneration.

DIAGNOSIS

- **Clinical evaluation**
- **Video polysomnography**

INTERNATIONAL CLASSIFICATION OF SLEEP
DISORDERS

REPEATED EPISODES OF SLEEP-RELATED
VOCALIZATION AND /OR COMPLEX MOTOR BEHAVIORS

BEHAVIORS ARE DOCUMENTED BY
POLYSOMNOGRAPHY

PRESENCE OF REM SLEEP WITHOUT ATONIA ON
POLYSOMNOGRAPHY

ABSENCE OF EPILEPTIFORM ACTIVITY DURING REM
SLEEP

THE SLEEP DISTURBANCE IS NOT BETTER EXPLAINED
BY ANOTHER SLEEP DISORDER, MEDICAL OR
NEUROLOGIC DISORDER, MENTAL DISORDER,
MEDICATION OR SUBSTANCE USE DISORDER.

DIFFERENTIAL DIAGNOSIS

- **Non REM parasomnias= confusional arousals, sleepwalking, sleep terrors.**
- **Parasomnia overlap disorder**
- **Nightmares**
- **Obstructive sleep apnea**
- **Periodic limbic movements**
- **Sleep-related dissociative disorder**
- **Sleep-related hypermotor epilepsy**

TREATMENT

- Address reversible factors (medications)
- Safe sleep environment
- Melatonin
- Clonazepam
- Cholinergic agents
- Pramipexole

PROGNOSIS

- Most patients with spontaneous RBD eventually develop an alpha-synuclein neurodegenerative disorder with a phenotype of Parkinson disease (PD), dementia with Lewy bodies, or multiple system atrophy
- A diagnosis of RBD is not absolutely predictive of the development of neurodegenerative disease, but rather suggests an **increased susceptibility**.