



## Editorial

## Editorial: “Injurious RBD and DEB frequency: are they related?”



Rapid eye movement (REM) sleep behavior disorder (RBD) is an important parasomnia which is most often a precursor of neurodegenerative disease, providing a window of opportunity to develop possible biomarkers for predicting those who may eventually develop a neurodegenerative disease. This may also spur the development of a neuroprotective agent to prevent or halt the progression of the disease. Although the prevalence of RBD in the general population is low, there is a high incidence of RBD-related injuries either to self or bed partner in a large percentage (33–95%) of such patients, and these injuries may vary from mild to quite severe (eg, fracture, subdural hematoma). It is, therefore, important to know the factors which might predispose these patients to have injurious behavior. In this issue, Mayo Clinic researchers [1] tried to identify such factors, analyzing data in a retrospective manner based on a questionnaire survey of consecutive adults (18 years and over), with idiopathic RBD (iRBD) and symptomatic RBD (sRBD) seen in the clinic between 2008 and 2010, regarding RBD-related injurious behavior. Fifty-three (40%) out of 133 patients receiving the survey responded.

The strength of the study is that the investigators studied a large adult clinical sample of RBD patients meeting the standard diagnostic criteria (both clinical and physiological). There is evidence of dream enacting behavior (DEB) with injuries to self or bed partner consisting of mild, moderate, and serious injuries, as well as polysomnographic (PSG) evidence of REM sleep without atonia or excessive phasic muscle activities during REM sleep. Fifty-five percent of patients had iRBD and 45% had comorbid neurodegenerative disease (sRBD). The authors found that patients with iRBD (who also had more severe DEBs and greater dream recall) and those with violent limb movements are more likely to present with REM-related injurious behavior.

Patients with sRBD, specifically patients with Parkinson’s disease and those with progression of underlying neurodegeneration, are less likely to have injurious behavior. They also found that those with comorbid depression, obstructive sleep apnea, antidepressant use, or dopaminergic drug use were not associated with injuries.

There are, however, several limitations in this retrospective study. These include low response rate (only 40%), lack of exclusion of confounding biases, and lack of generalizability to a community sample. Furthermore, cognitive impairment in sRBD patients may have limited their ability to recall. Finally, lack of direct interview and examination to unveil subtle signs of a neurodegenerative disease in the so-called iRBD patients encouraged a high chance of misclassification of the condition. Despite these limitations the authors provided food for thought and encouragement for investigators to conduct a prospective study. Their final conclusion that the frequency of DEB is not directly related to injurious behavior implies that all RBD patients should be treated (with safety measures and medications) even though the injuries are infrequent.

## Reference

- [1] McCarter S, St. Louis E, Boswell C, Dueffert LG, Slocumb N, Boeve BF, et al. Factors associated with injury in REM sleep behavior disorder. *Sleep Med* 2014;15(11):1287.

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