



REM Sleep Behavior Disorder Can Herald Later Neurodegenerative Disease

A recent study points to idiopathic REM Sleep Behavior Disorder (RBD) as a harbinger of neurodegenerative disease.¹

RBD is manifested as a loss of the normal muscle inhibition that accompanies REM sleep, resulting in potentially harmful and complex behaviors (e.g. punching, kicking, crying) during dreaming. Patients literally act out dream content. Diagnosis requires polysomnographic confirmation of abnormal REM-related motor activity. The estimated prevalence in the general adult population is one in 200, and men are affected far more often than women.

Canadian researchers followed 93 patients diagnosed with RBD at a hospital sleep disorders center between 1989 and 2006 in order to measure their risk of developing neurodegenerative disease. None had signs of neurodegenerative disease when RBD was diagnosed. Eighty percent of the sample was male, and the mean age at diagnosis was 65 years.

During the study years, 26 patients developed neurodegenerative disease: 14 developed Parkinson's disease, one developed multiple system atrophy, seven met criteria for Lewy body dementia, and four met criteria for Alzheimer's dementia although Lewy body dementia was suspected in these cases too.

The risk for developing parkinsonism or dementia increased with time following the confirmation of RBD. **Across the entire sample, the estimated 5-year risk was 18%, the 10-year risk was 41%, and the 12-year risk was 52%.** A smaller, previous case series reported an even higher 10-year risk of 65%. This contrasts with the general population where the lifetime risk is 1-2% for parkinsonism and 1-3% for Lewy body dementia.

TAKE HOME MESSAGE: The majority of patients with idiopathic RBD will go on to develop a neurodegenerative disease. Understanding this risk allows for appropriate counseling and any potential neuroprotective therapies. Because SJH Sleep Disorders Center has expertise in both sleep medicine and neurological disease, we can provide comprehensive care for your RBD patients.

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1. Postuma et al. (2009) Quantifying the risk of neurodegenerative disease in idiopathic REM sleep behavior disorder. *Neurology* 72(15): 1296-300.