REM sleep behavior disorder (RBD) should be considered as a precursor and marker for alpha synucleinopathies and promote therapeutic intervention (Con)

L. Vecsei
Department of Neurology, Faculty of Medicine, Albert-Szent-Györgyi Clinical Center, University of Szeged and MTA-SZTE Neuroscience Research Group, Hungary

Much interest has arised around the association between RBD and a goup of neurodegenerative diseases involving abnormal aggregation of the protein alpha-synuclein, comprising Parkinson's disease (PD), multiple system atrophy (MSA), dementia with Lewy bodies (DLB), and pure autonomic failure (PAF) collectively termed „the synucleinopathies". Recently, it was published that excessive daytime sleepiness predicts neurodegeneration in idiopathic RBD. The Movemenet Disorder Society (MDS) has proposed a set of the research criteria for prodromal PD, which specified RBD as the most predictive prodromal marker with the highest likelihood ratio. Thus, there is increasing attention on searching the biomarkers that might predict the progression of RBD toward PD, such as olfactory loss, color vision deficit, depression and mild cognitive impairment. Clinical data suggest that isolated RBD in middle aged and older adults could herald future synuclein-related neurodegeneration, dignifying it as an early marker of later degeneration. However, in some other studies, the presence of autonomic dysfunction does not seem to either predict or be associated with further neurodegeneration. RBD should be considered part of a broader spectrum of neurodegeneration, in line with the proposed Braak's staging model of synucleopathies, in which central and peripheral autonomic degeneration is predicted to occur at the earliest stages. Recend findings focuses on alpha synuclein aggregation inhibitors and their therapeutic role, with special attention to heat shock proteins, immunotherapy (active and passive), the potential of targeting the Ser129 phosphorylation site, and the antibiotic possiblities. Some controversies of RBD in clinical practice will be discussed.