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REM Behavior Disorder diagnostic challenges

Desafios no diagnóstico clínico do Distúrbio Comportamental do Sono REM

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Rapid eye movement (REM) sleep behavior disorder (RBD) is a relevant sleep disorder for neurologists, psychiatrists, and geriatricians since it is currently recognized as a condition that represents a prolonged prodromal state of neurodegenerative disorders, mainly alpha-synucleinopathies[1]. Despite the importance of its early detection for adequate long-term care planning and counseling, RBD remains underdiagnosed, particularly in its mild form, with mild symptoms, in which patients or their bed partners do not experience harm, injury, or significant sleep disruption[2]. In some cases, when the bed partner is injured, shame and concern about exposure may prevent patients and bed partners from seeking medical help. Finally, the combination of low health literacy in the general population and poor access to healthcare in Brazil poses additional challenges to the diagnosis of RBD in our context[3].

For the clinician, the recommended stepwise approach to detect and confirm a suspected case of RBD can also become a prolonged endeavor. A detailed history of the abnormal behavior, its frequency, the severity of episodes, time of the night, and other neurological or psychiatric symptoms play an essential role in the diagnostic pathway of RBD. Furthermore, polysomnographic (PSG) criteria for the diagnosis is still advancing and expecting a consensus, as the American Academy of Sleep Medicine (AASM) considers over 50% of each 30-second epoch of REM without atonia to confirm the RBD diagnosis[4], while the International Classification of Sleep Disorders – Third Edition (ICSD-3) establishes over 27% for the same parameter[5]. Video monitoring to document the abnormal behavior, as well as vocalizations, is highly recommended. Moreover[4], PSG visual scoring is somehow subjective, and the occurrence of apnea events and arousals during REM sleep also impairs the proper electromyographic (EMG) analysis. Ultimately, RBD episodes may not occur nightly. Likely, a clear episode does not happen in a single PSG night.

In this scenario, Pena-Pereira et al.[6] concluded a clinically applicable effort by not only providing evidence of the validity but also evaluating the overall performance and psychometric properties of the REM sleep behavior disorder screening questionnaire (RBDSQ) in recognizing RBD cases confirmed by polysomnography using ICSD-3 criteria[5]. They found an adequate internal consistency, similar to that of the original report and other validation studies, and identified that cut-off values lower than 3 and higher than 4 are sensitive enough to rule out or confirm RBD among Parkinson's disease (PD) patients. Interestingly, the best cut-off values to recognize RBD varied from 4 to 8, according to the population studied[6,7,8,9].

Demographic and epidemiological factors deriving from the aging of the Brazilian population are leading to a potential growing prevalence of neurodegenerative diseases and RBD. Early detection using simple tools such as the RBDSQ might offer opportunities for the timely planning of preventive and therapeutic strategies to delay functional capacity decline stemming from the progression of the initial sleep condition to a neuropsychiatric disorder affecting motor and cognitive functions. Besides, recognizing and treating RBD improves the sleep quality of the patient, their bed partner, and other residents of the household, allowing the physician to plan follow-up strategies.

We emphasize the contribution of the study by Pena-Pereira et al. in validating the RBDSQ scale in a Brazilian sample of patients. However, we also acknowledge that its validation was performed only in a specific population of PD patients with and without RBD and that more studies are required to provide further evidence of the validity of RBDSQ in other population subsets.

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