Impact of Post Traumatic Stress Disorder (PTSD) on the clinical expression of REM Sleep Behavior Disorder (RBD) in Veterans with Parkinson's Disease (PD)

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Objective:
This project was designed to study the frequency of occurrence and pattern of clinical expression of REM sleep behavior disorder (RBD) in Veterans with PD, with and without co-morbid post traumatic stress disorder (PTSD).

Background:
RBD is common in PD and is also associated with PTSD. However, the impact of comorbid PTSD with PD on the clinical expression of RBD is not known.

Methods:
107 Veterans with PD were screened using PTSD-Civilian scale (PCL-C) and RBD Questionnaire –HK (RBDQ-HK). For the PCL-C, PTSD+ was defined as described on the VA National Center for PTSD website using the combined method of having a total symptom severity score exceeding a given normative threshold (≥ 39 was used) and presence of symptoms meeting the DSM IV criteria. For the RBDQ-HK, a cut point of ≥ 19 was used to define presence or absence of RBD. Differences in the distribution of PD-PTSD(+) and PD-PTSD(-) subjects for items on the RBDQ-HK scale were examined.

Results:
The groups were comparable with respect to age, H&Y, and UPDRS. The scores for the PCL-C and HK-RBDQ scales were correlated, (Spearman’s rho = 0.365, 2-tailed p= 0.01) and higher PTSD scores associated with higher HK-RBDQ scores. Lifetime occurrence of nightmares was significantly higher in PD-PTSD+ group than the PD-PTSD(-) subjects (69.2% vs. 32.2%, p = 0.014). When the same questions were examined for absence/presence within the last year, results were similar, except that an additional item related to violent or aggressive dream content, was answered as positive by a greater proportion of PD-PTSD(+) subjects (69.2% vs. 32.2%, p=0.014).

The groups did not differ with respect to the occurrence of dreams. When the same questions were examined for absence/presence within the last year, results were similar, except that an additional item related to violent or aggressive dream content, was answered as positive by a greater proportion of PD-PTSD(+) subjects (69.2% vs. 32.2%, p=0.014).

The groups were comparable with respect to age, H&Y, and UPDRS.

Conclusion: Presence of Post Traumatic Stress Disorder intensifies the expression and changes the pattern of the clinical manifestation of REM Sleep Behavior Disorder in Veterans with Parkinson’s disease, without significantly increasing its frequency of occurrence.

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