Patients Hospitalised for Parkinson’s disease: Which are the News

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LETTER TO THE EDITOR

Recent studies demonstrated that individuals with Parkinson’s disease (PD) require 1.5 times more likely hospitalization than controls (Lance, S. et al., 2021). Additionally, duration of hospitalisation and rate of complications, particularly infections and delirium, are increased in PD patients (Lance, S. et al., 2021). Unfortunately there is evidence that inpatients with PD may have a higher mortality rate than outpatients with PD (Lance, S. et al., 2021). Based on these facts, we enjoyed reading the recent article entitled, “Description of multimorbidity clusters of admitted patients in medical departments of a general hospital” by Matesanz-Fernández and colleagues published in the Intern Med J (Matesanz-Fernández, M. et al., 2021). The authors identified for the first time some clusters of comorbidities among inpatients with PD. Considering the strong clinical relevance of these results, what are the repercussions on cardiac events in PD?

Really, PD is one of the most frequent age-related neurodegenerative disorders, affects millions of people globally, has no cure, and several studies demonstrated that patients with PD have an increased mortality compared to the general population (Poewe, W. et al., 2017; Lee, A., & Gilbert, R. M. 2016; & Scorza, F. A. et al., 2018). The predominant causes of death in PD are pneumonia and cardiovascular diseases. Besides that, sudden unexpected death in PD (SUDPAR), a rare but fatal event, is increasingly discussed as a contributor to mortality in PD (Poewe, W. et al., 2017; Lee, A., & Gilbert, R. M. 2016; & Scorza, F. A. et al., 2018). SUDPAR has been defined as unexpected death of a patient with PD without any satisfactory explanation of death as determined by autopsy (Scorza, F. A. et al., 2018; & Scorza, F. A. et al., 2017). So far there are no epidemiological studies that precisely demonstrate the possible distribution of SUDPAR among main research centers for movement disorders, but relevant data that evaluated SUDPAR cases found that an average of 14% of PD patients dies suddenly. Although causes of SUDPAR are not yet entirely identified (Scorza, F. A. et al., 2018; & Scorza, F. A. et al., 2017), translational studies suggest that cardiac abnormalities and autonomic dysfunction play a possible “direct” role in SUDPAR, even because ~60% of PD patients have cardiovascular comorbidities and because of the frequent autonomic disturbances in PD. Moreover, some determinants may be directly related to SUDPAR, such as age at onset, duration of PD, gender, motor severity and drug treatment (polypharmacy) (Scorza, F. A. et al., 2018; & Scorza, F. A. et al., 2017). However, these risk factors of SUDPAR need to be further investigated. Considering these clinical aspects, a current question could be: How to follow the news about SUDPAR?

In fact, a fundamental practical problem in studying SUDPAR risk factors, mechanisms, and prevention is that it is relatively uncommon. Thus, crucial questions are whether and when to talk about SUDPAR to individuals and family
members. To answer these questions, it would be appropriate to establish a task force that discusses issues related to SUDPAR. Furthermore, a close convergence of clinical research and clinical care (e.g., neurologists, cardiologists, and other multidisciplinary team members) is extremely important to assess and establish the state of knowledge of SUDPAR (Scorza, F. A. et al., 2017). Moreover, another point suggested in the literature is the importance of focusing also on dietary habits and food preferences in PD patients, facts related to the prevention of possible cases of SUDPAR (Cassani, E. et al., 2017; & Menezes-Rodrigues, F. S. et al., 2019). In view of the complex needs of people with PD, a very recent study verified the reason for admission, specialist team interventions, length of stay, frequency of readmission, discharge destination, mortality and the bed cost per unplanned emergency department (ED) attendance or hospital admission episode (Hobson, P. et al., 2019). It was found that the mortality of PDs admitted via the emergency department was twice as much as those of non-PD patients (Hobson, P. et al., 2019).

On the whole, PD is a heterogeneous, multifactorial, and systemic neurodegenerative disorder. To reduce mortality rates in PD individuals, a multidisciplinary team should perform routine cardiovascular screening (ECG, Holter-monitoring, and echocardiography (Scorza, F. A. et al., 2018; & Scorza, F. A. et al., 2017). Explanations for increased mortality rates in PD patients and for the occurrence of SUDPAR are warranted.

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REFERENCES