

Parkinson's Disease Current Awareness Bulletin

March 2023

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1. Orthostatic Hypotension Is a Predictor of Fatigue in Drug-Naive Parkinson's Disease.

Authors: Ahn, Jong Hyeon;Cho, Jin Whan and Youn, Jinyoung

Publication Date: 2023

Journal: Parkinsons Disease 2023, pp. 1700893

Abstract: Introduction: Fatigue and orthostatic hypotension (OH) are common and disabling nonmotor symptoms (NMSs) of Parkinson's disease (PD), but none of the studies have reported on the longitudinal association between fatigue and OH. Methods: Drug-naive PD patients were recruited from a hospital-based cohort and evaluated with the Parkinson Fatigue Scale (PFS), head-up tilt test, Unified PD Rating Scale, Hoehn and Yahr stage, Montreal Cognitive Assessment, Scale for Outcomes in PD-Autonomic (SCOPA-AUT), Beck Depression Inventory (BDI), Beck Anxiety Inventory, PD Sleep Scale, and medications at the baseline and follow-up visits. Results: A total of 80 patients were included, and the mean ages were 66.6 and 63.8 years in the fatigue and nonfatigue groups, respectively. The prevalence of fatigue was 17.5% (14/80) at the baseline and follow-up (mean follow-up: 23.3 +/- 9.9 months). The prevalence of OH in the fatigue group was 57.1%, and it was significantly higher than that of the nonfatigue group. Six of the 14 patients (42.9%) in the fatigue group had persistent fatigue at the follow-up, and eight of them (57.1%) converted to the nonfatigue group. Logistic regression analysis demonstrated that the changes of BDI and the presence of OH at the baseline were the predictors for fatigue in drug-naive PD. Conclusion: Fatigue is a common NMS in PD but can vary depending on the disease course. OH and depression are the most relevant predictors for the development of fatigue in drug-naive PD. The present study suggests that the management of autonomic symptoms and depression might be helpful for managing fatigue in PD. Copyright © 2023 Jong Hyeon Ahn et al.

2. Parkinson's disease following COVID-19: six cases report.

Authors: Calculi, A.;Bocci, T.;Porcino, M.;Avenali, M.;Casellato, C.;Arceri, S.;Regalbuto, S.;Priori, A. and Pisani, A.

Publication Date: 2023

Journal: European Journal of Neurology (pagination), pp. no pagination

Abstract: BACKGROUND: Core clinical manifestation of COVID-19 include flu-like and respiratory symptoms. However, it is now evident that neurological involvement may occur during SARS-CoV-2 infection, covering an extensive spectrum of phenotypical manifestations. A major challenge arising from this pandemic is represented by detecting emerging neurological complications following recovery from SARS-CoV-2 infection. To date, few post-COVID-19 infected subjects diagnosed with Parkinson's Disease (PD) were described, raising the possibility of a connection between the infection and neurodegenerative process. Here, we describe a cases series of six subjects, who developed PD after COVID-19. METHOD(S): Patients were observed at IRCCS Mondino Foundation Hospital, Pavia (Italy), and San Paolo University Hospital of Milan (Italy) between March 2021 and June 2022. In all subjects, SARS-CoV-2 infection was confirmed by means of a RT-PCR from a nasopharyngeal swab. Subjects underwent an accurate neurological evaluation, and neuroimaging studies were performed. RESULT(S): We describe six subjects, who developed PD with an average time window after SARS-CoV-2 infection of 4-7 weeks. Apparently, no relationship with COVID-19 severity emerged, and no overt

structural brain abnormalities were found. All subjects experienced unilateral resting tremor at onset and showed a satisfactory response to dopaminergic treatment. **CONCLUSION(S):** Immune responses to SARS-CoV-2 infection have been shown to shape the individual susceptibility to develop long-term consequences. We hypothesize that, in these subjects, COVID-19 has unmasked a latent neurodegenerative process. Characterization of the neuroinflammatory signatures in larger cohorts is warranted, which might provide novel insights in the pathogenesis of PD. Copyright This article is protected by copyright. All rights reserved.

3. Toxin Induced Parkinsonism and Hospitalization Related Adverse Outcome Mitigation for Parkinson's Disease: A Comprehensive Review

Authors: Dalton, Kenneth R.; Kidd, Charles J. and Hack, Nawaz

Publication Date: Jan 30 ,2023

Journal: Journal of Clinical Medicine 12(3)

Abstract: Patients with Parkinson's disease admitted to the hospital have unique presentations. This unique subset of patients requires a multidisciplinary approach with a knowledge-based care team that can demonstrate awareness of complications specific to Parkinson's disease to reduce critical care admissions, morbidity, and mortality. Early recognition of toxic exposures, medication withdrawals, or medication-induced symptoms can reduce morbidity and mortality. This review can assist in the critical assessment of new or exacerbating Parkinson's disease symptoms.

4. Neurotrophic Factors as Regenerative Therapy for Neurodegenerative Diseases: Current Status, Challenges and Future Perspectives

Authors: El Ouaamari, Yousra; Van den Bos, Jasper; Willekens, Barbara; Cools, Nathalie and Wens, Inez

Publication Date: Feb 15 ,2023

Journal: International Journal of Molecular Sciences 24(4)

Abstract: Neurodegenerative diseases, including Alzheimer's disease (AD), Parkinson's disease (PD), Huntington's disease (HD), multiple sclerosis (MS), spinal cord injury (SCI), and amyotrophic lateral sclerosis (ALS), are characterized by acute or chronic progressive loss of one or several neuronal subtypes. However, despite their increasing prevalence, little progress has been made in successfully treating these diseases. Research has recently focused on neurotrophic factors (NTFs) as potential regenerative therapy for neurodegenerative diseases. Here, we discuss the current state of knowledge, challenges, and future perspectives of NTFs with a direct regenerative effect in chronic inflammatory and degenerative disorders. Various systems for delivery of NTFs, such as stem and immune cells, viral vectors, and biomaterials, have been applied to deliver exogenous NTFs to the central nervous system, with promising results. The challenges that currently need to be overcome include the amount of NTFs delivered, the invasiveness of the delivery route, the blood-brain barrier permeability, and the occurrence of side effects. Nevertheless, it is important to continue research and develop standards for clinical applications. In addition to the use of single NTFs, the complexity of chronic inflammatory and degenerative diseases may require combination therapies targeting multiple pathways or other possibilities using smaller molecules, such as NTF mimetics, for effective treatment.

5. Association between C-reactive protein-albumin ratio and overall survival in Parkinson's disease using publicly available data: A retrospective cohort study.

Authors: Gao, Mengqi;Zhang, Chuanlong;Gao, Lijie;Sun, Shanmei;Song, Lucheng and Liu, Shiwei

Publication Date: Feb ,2023

Journal: Heliyon 9(2), pp. e12671

Abstract: Background: At present, many studies have confirmed that inflammation plays a central role in Parkinson's disease (PD). The inflammatory index is related to the prognosis of the disease, but a single inflammatory index has some limitations. The C-reactive protein-albumin ratio (CAR) is a better marker of inflammation or nutritional status than C-reactive protein (CRP) or albumin (Alb), but there is limited study on the association between CAR and the overall survival (OS) of PD. Object: To study the association between CAR and OS in PD patients. Methods: All of these data were obtained from the Dryad Digital Repository, based on which we conducted a secondary analysis. The study was conducted by the Department of Neurology, the National Regional Center for Neurological Disorders, and the National Hospital of Utano study between March 2004 to November 2007. The final analytic sample included 235 PD patients with the outcome of survival or all-cause death from the study registration to the endpoint. In this study, univariate and multivariate COX regression analyses were used to calculate the adjusted hazard ratio (HR), with a 95% confidence interval (CI). In addition, the association between CAR and OS in PD patients was explored by Kaplan-Meier curve and subgroup analysis. Results: This study included 235 PD patients with an average age of 62.25 years, including 135 females and 100 males, and 45 died during the follow-up period. CAR was associated with gender, modified Hoehn-Yahr stages (mH-Y), and Mini-Mental State Examination (MMSE) of PD patients. In the COX multivariate regression model, after adjusting the age, gender, PD duration, mH-Y, MMSE, and the non-steroidal anti-inflammatory drugs, CAR was found to be associated with the OS in PD (HR = 1.54, 95% CI = 1.01-2.34, p = 0.044). Subgroup analysis showed that the subgroup did not play an interactive role in the association between the prognosis of patients with CAR and PD (p for interaction >0.05), and the results remained stable. Conclusions: The all-cause mortality of PD patients with a high level of CAR is higher, which indicates that the poor overall survival of PD patients is associated with the increase of CAR. The CAR may be a reliable prognostic biomarker for PD patients. Copyright © 2023 The Authors.

6. Cost and Early Complication Analysis Following Total Hip Arthroplasty in Parkinson's Disease Patients: A Propensity-matched Database Study.

Authors: Goel, Akshay;Viswanathan, Vibhu Krishnan;Purudappa, Prabhudev Prasad;Sakthivelnathan, Vishaal;Mounasamy, Varatharaj and Sambandam, Senthil

Publication Date: 2023

Journal: Archives of Bone & Joint Surgery 11(1), pp. 47-52

Abstract: Background: Parkinson's Disease is a well-known neuromuscular disorder, which affects the stability and gait of elderly patients. With the progressive increase in the life span of patients with PD, the problem of degenerative arthritis and the consequent need for total hip arthroplasty (THA) in this cohort are rising. There is paucity of data in the existing literature regarding the healthcare costs and overall outcome following THA in PD patients. The current study was planned to assess the hospital expenditure, details regarding hospital stay, and complication rates for patients with PD, who underwent THA. Methods: We

investigated the National Inpatient Sample data to identify PD patients, who underwent hip arthroplasty from 2016 to 2019. Using propensity score, PD patients were matched 1:1 to patients without PD by age, gender, non-elective admission, tobacco use, diabetes, and obesity. Chi-square and T-tests were used for analyzing categorical and non-categorical variables, respectively (Fischer-Exact test was employed for values PP). After matching, PD group had higher total hospital costs, longer hospital stay, greater blood loss anemia, and prosthetic dislocation (PP). The in-hospital mortality was similar between the two groups. Conclusion: Patients with PD undergoing THA required greater proportion of emergent hospital admissions. Based on our study, the diagnosis of PD showed significant association with greater cost of care, longer hospital stay, and higher post-operative complications.

7. Pallidal stimulation-induced psychosis and suicidality in Parkinson's disease

Authors: Hanna, S., Palmadottir, V., Penar, P.L. and Boyd, J.T.

Publication Date: 2023

Publication Details: England:

Abstract: Neuropsychiatric adverse events have been previously reported following deep brain stimulation (DBS) for Parkinson's disease (PD). Most cases described have involved DBS of the subthalamic nucleus (STN). We report a unique case of acute-onset and reversible psychosis, suicidality, and depressive symptoms following DBS of the globus pallidus internus (GPI) and review the relevant literature. Copyright © 2022 The Authors. Published by Elsevier Ltd.

8. Hard to swallow? A review into dysphagia care in patients with Parkinson's disease.

Authors: Koomson, D'Marieanne;Freeth, Heather;Goodwin, Alexander and Srivastava, Vivek

Publication Date: Feb 02 ,2023

Journal: British Journal of Hospital Medicine 84(2), pp. 1-4

Abstract: The National Confidential Enquiry into Patient Outcome and Death reviewed the quality of dysphagia care provided to patients with Parkinson's disease admitted to hospital when acutely unwell. It highlights both clinical and organisational changes that should be made to improve patient care and outcomes.

9. Tinetti balance performance is associated with mortality in older adults with late-onset Parkinson's disease: a longitudinal study.

Authors: Laurent, Louise;Koskas, Pierre;Estrada, Janina;Sebbagh, Melanie;Lacaille, Sophie;Raynaud-Simon, Agathe and Lilamand, Matthieu

Publication Date: 01 30 ,2023

Journal: BMC Geriatrics 23(1), pp. 54

Abstract: BACKGROUND: Parkinson's disease (PD) is associated with a 3-fold mortality

risk, which is closely related to advancing age. Evidence is lacking regarding the factors associated with the risks of mortality or nursing-home (NH) admission, in elderly patients with PD. We aimed at identifying the clinical characteristics associated with these outcomes, in older community-dwelling patients with late-onset PD. **METHODS:** Retrospective, observational analysis of data from geriatric day hospital patients. Motor assessment included Unified Parkinson Disease Rating Scale (UPDRS) part III score, Tinetti Performance Oriented Mobility Assessment (POMA) balance and gait tests, and gait speed. Levodopa equivalent dose, comorbidity, cognitive performance, Activities of Daily Living performance were examined. Cox proportional hazards models were performed to identify the factors associated with mortality and NH admission rate (maximum follow-up time = 5 years). **RESULTS:** We included 98 patients, mean age 79.4 (SD = 5.3) of whom 18 (18.3%) died and 19 (19.4%) were admitted into NH, over a median follow-up of 4 years. In multivariate Cox models, poor balance on the Tinetti POMA scale (HR = 0.82 95%CI (0.66-0.96), $p = .023$) and older age (HR = 1.12 95%CI (1.01-1.25), $p = .044$) were the only variables significantly associated with increased mortality risk. A Tinetti balance score below 11/16 was associated with a 6.7 hazard for mortality ($p = .006$). No specific factor was associated with NH admissions. **CONCLUSIONS:** Age and the Tinetti POMA score were the only factors independently associated with mortality. The Tinetti POMA scale should be considered for balance assessment and as a screening tool for the most at-risk individuals, in this population. Copyright © 2023. The Author(s).

10. Assessing the risks of treatment in Parkinson disease psychosis: An in-depth analysis.

Authors: Longardner, Katherine;Wright, Brenton A.;Alakkas, Aljoharah;You, Hyeri;Xu, Ronghui;Liu, Lin and Nahab, Fatta B.

Publication Date: 2023

Journal: PLoS ONE [Electronic Resource] 18(1), pp. e0278262

Abstract: **BACKGROUND:** Parkinson disease (PD) psychosis (PDP) is a disabling non-motor symptom. Pharmacologic treatment is limited to pimavanserin, quetiapine, and clozapine, which do not worsen parkinsonism. A Food and Drug Administration black box warning exists for antipsychotics, suggesting increased mortality in elderly patients with dementia. However, the reasons for higher mortality are unknown. **AIM:** Expanding on prior work exploring mortality in treated PDP patients, we conducted a retrospective comparison to understand the links between treatment regimen, clinical characteristics, and negative outcomes. **METHODS:** Electronic medical record data extraction included clinically diagnosed PD patients between 4/29/16-4/29/19 and excluded patients with primary psychiatric diagnoses or atypical parkinsonism. Mortality and clinical characteristics during the study period were compared between untreated patients and those receiving pimavanserin, quetiapine, or both agents (combination). Mortality analyses were adjusted for age, sex, levodopa equivalent daily dose (LEDD), and dementia. **RESULTS:** The pimavanserin group ($n = 34$) had lower mortality than the untreated group ($n = 66$) (odds ratio = 0.171, 95% confidence interval: 0.025-0.676, $p = 0.026$). The untreated group had similar mortality compared to the quetiapine ($n = 147$) and combination ($n = 68$) groups. All treated groups had a higher LEDD compared to the untreated group, but no other differences in demographics, hospitalizations, medical comorbidities, medications, or laboratory values were found between the untreated and treated groups. **CONCLUSIONS:** PDP patients receiving pimavanserin had lower mortality than untreated patients. We found no other clear differences in clinical characteristics to explain the mortality risk. Prospective randomized trials are needed to definitively identify the optimal PDP treatment regimen and associated risks. Copyright: © 2023 Longardner et al. This is an open access article

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11. A Systematic Review and Meta-analysis of Respiratory Dysfunction in Parkinson's Disease.

Authors: McMahon, L.;Blake, C. and Lennon, O.

Publication Date: 2023

Journal: European Journal of Neurology (pagination), pp. no pagination

Abstract: INTRODUCTION: Respiratory dysfunction in Parkinson's Disease (PD) is common and associated with increased hospital admission and mortality rates. Central and peripheral mechanisms have been proposed in PD. To date no systematic review identifies the extent and type of respiratory impairments in PD compared with healthy controls. METHOD(S): PubMed, EMBASE, CINAHL, Web of Science, Pedro, MEDLINE, Cochrane Library and OpenGrey were searched from inception to December 2021 to identify case-controlled studies reporting respiratory measures in Parkinson's Disease and matched controls. RESULT(S): Thirty-nine studies met inclusion criteria, the majority with low risk of bias across RoBANS domains. Data permitted pooled analysis for 26 distinct respiratory measures. High-to-moderate certainty evidence of impairment in PD was identified for Vital Capacity (SMD 0.75; 95%CI 0.45-1.05; p RESULT(S): Thirty-nine studies met inclusion criteria, the majority with low risk of bias across RoBANS domains. Data permitted pooled analysis for 26 distinct respiratory measures. High-to-moderate certainty evidence of impairment in PD was identified for Vital Capacity (SMD 0.75; 95%CI 0.45-1.05; p RESULT(S): Thirty-nine studies met inclusion criteria, the majority with low risk of bias across RoBANS domains. Data permitted pooled analysis for 26 distinct respiratory measures. High-to-moderate certainty evidence of impairment in PD was identified for Vital Capacity (SMD 0.75; 95%CI 0.45-1.05; p RESULT(S): Thirty-nine studies met inclusion criteria, the majority with low risk of bias across RoBANS domains. Data permitted pooled analysis for 26 distinct respiratory measures. High-to-moderate certainty evidence of impairment in PD was identified for Vital Capacity (SMD 0.75; 95%CI 0.45-1.05; p CONCLUSION(S): Strong evidence supports a restrictive pattern with inspiratory muscle weakness in Parkinson's Disease compared with healthy controls. Limited data for central impairment were identified with inconclusive findings. Copyright This article is protected by copyright. All rights reserved.

12. Comparison between a handheld ultrasound device and a traditional ultrasound for performing transcranial sonography in patients with Parkinson's disease.

Authors: Paes, Maria A. S.;Nicaretta, Denise H.;Alvarenga, Regina M. P.;Rosso, Ana L. Z.;Brisson, Rodrigo T. and Fernandes, Rita C. L.

Publication Date: Feb ,2023

Journal: Brain and Behavior 13(2), pp. e2891

Abstract: OBJECTIVE: The aim of this study is to compare a portable ultrasound (US) device and a traditional US for performing transcranial ultrasonography (CCT) in patients with Parkinson's disease (PD). METHODS: This is a cross-sectional, observational, and analytical study. The study recruited a total of 129 individuals from two public hospitals in the

city of Rio de Janeiro in a prospective and non-randomized manner between September 2019 and July 2021 as follows: group A with 31 patients with PD, group B with 65 patients with PD, and group C with 64 healthy individuals. Group A was used to collect data to establish the agreement analysis of the TCS measurements between the two devices. Groups B and C provided data for constructing the receiver operating characteristic curve for the handheld US. The subjects underwent the assessment of the transtemporal bone window (TW) quality, the mesencephalon area, the size of the third ventricle, and the substantia nigra (SN) hyperechogenicity area. **RESULTS:** There was a good agreement between the methods regarding the quality of the TW-Kappa concordance coefficient of 100% for the right TW and 83% for the left, the midbrain area-intraclass correlation coefficient (ICC) of 69%, the SN area ICC = 90% for the right SN and 93% for the left and the size of the third ventricle ICC = 96%. The cutoff point for the SN echogenic area in the handheld US was 0.20 cm². **CONCLUSIONS:** The handheld US is a viable imaging method for performing TCS because it shows good agreement with the measurements performed with traditional equipment, and the measurement of SN echogenic area for PD diagnosis presents good sensitivity and specificity. Copyright © 2023 The Authors. Brain and Behavior published by Wiley Periodicals LLC.

13. Falls Predict Acute Hospitalization in Parkinson's Disease.

Authors: Santos Garcia, D.;De Deus Fonticoba, T.;Cores, C.;Suarez Castro, E.;Hernandez Vara, J.;Jesus, S.;Mir, P.;Cosgaya, M.;Jose Marti, M.;Pastor, P.;Cabo, I.;Seijo, M.;Legarda, I.;Vives, B.;Caballol, N.;Ruiz Martinez, J.;Croitoru, I.;Cubo, E.;Miranda, J.;Alonso Losada, M. G., et al

Publication Date: 2023

Journal: Journal of Parkinson's Disease 13(1), pp. 105-124

Abstract: Background: There is a need for identifying risk factors for hospitalization in Parkinson's disease (PD) and also interventions to reduce acute hospital admission. Objective(s): To analyze the frequency, causes, and predictors of acute hospitalization (AH) in PD patients from a Spanish cohort. Method(s): PD patients recruited from 35 centers of Spain from the COPPADIS-2015 (COhort of Patients with PArkinson's Disease in Spain, 2015) cohort from January 2016 to November 2017, were included in the study. In order to identify predictors of AH, Kaplan-Meier estimates of factors considered as potential predictors were obtained and Cox regression performed on time to hospital encounter 1-year after the baseline visit. Result(s): Thirty-five out of 605 (5.8%) PD patients (62.5+/-8.9 years old; 59.8% males) presented an AH during the 1-year follow-up after the baseline visit. Traumatic falls represented the most frequent cause of admission, being 23.7% of all acute hospitalizations. To suffer from motor fluctuations (HR [hazard ratio] 2.461; 95% CI, 1.065-5.678; p = 0.035), a very severe non-motor symptoms burden (HR [hazard ratio] 2.828; 95% CI, 1.319-6.063; p = 0.008), falls (HR 3.966; 95% CI 1.757-8.470; p = 0.001), and dysphagia (HR 2.356; 95% CI 1.124-4.941; p = 0.023) was associated with AH after adjustment to age, gender, disease duration, levodopa equivalent daily dose, total number of non-antiparkinsonian drugs, and UPDRS-IIIOFF. Of the previous variables, only falls (HR 2.998; 95% CI 1.080-8.322; p = 0.035) was an independent predictor of AH. Conclusion(s): Falls is an independent predictor of AH in PD patients. Copyright © 2023-The authors. Published by IOS Press.

14. Non-Motor symptoms burden in early stages of parkinson's disease.

Authors: Sardar, Z.;Liaquat, S.;Yousaf, Q.;Bano, S. and Numan, A.

Publication Date: 2023

Journal: Annals of Indian Academy of Neurology 26(1), pp. 39-43

Abstract: Background: Non-motor symptoms (NMSs) in Parkinson's disease (PD) are often overlooked and thus can impede clinical management and significantly reduce the patient's quality of life. Aim(s): The study aimed to determine the burden of NMS in the early stages of PD. Material(s) and Method(s): A 1-year observational cross-sectional study was conducted at Mayo Hospital, Lahore, in 2019. The MDS-PD criteria were used to diagnose PD patients. The study included patients with Hoehn and Yahr (HY) stages 1-3. The frequency of NMSs was assessed using a non-motor symptom questionnaire (NMSQ), and the non-motor symptom scale (NMSS) score was derived using the NMSS. Result(s): A total of 100 PD patients were enrolled in the study. Sixty-three (63%) were males and 37 (37%) were females. Their age ranged between 45 and 75 years with a mean \pm SD of 57.46 \pm 8.46. At least one NMS was reported by 84% of patients, with neuropsychiatric symptoms (68%) preponderant, followed by a change in taste and smell (64%). The mean NMSS score is 46.22 \pm 22.098 (median 44) with a range from 0 to 88, with the trend being increasing score with the advancing stage. Conclusion(s): The use of the NMSQ and NMSS tools should be standard in clinical practice to identify the severity of the disease and commence appropriate care. Copyright © 2023 Wolters Kluwer Medknow Publications. All rights reserved.

15. Potentially inappropriate medications among elderly people with neurocognitive disorders - A nationwide register-based study using 3 different explicit criteria.

Authors: Sonnerstam, E.;Harlin, F. and Gustafsson, M.

Publication Date: 2023

Journal: Research in Social & Administrative Pharmacy : RSAP (pagination), pp. no pagination

Abstract: BACKGROUND: The use of potentially inappropriate medications (PIMs) is a problem since it might contribute significantly to adverse drug reactions and hospital admissions among elderly with major neurocognitive disorder (NCD). To assess the appropriateness of drug treatment, different explicit criteria have been developed. OBJECTIVE(S): To investigate and compare the prevalence of PIM users among elderly with major NCD on a nationwide basis using 3 different explicit criteria. Furthermore, the study aimed to investigate factors associated with the use of PIMs. METHOD(S): This nationwide register-based study included 35,212 people, 65 years or older, diagnosed with major NCD and registered in the Swedish registry for cognitive/dementia disorders up to June 30, 2017 and alive December 31, 2017. PIMs were identified using 3 different explicit criteria; the Swedish quality indicators, the EU(7)-PIM list and the AGS Beers Criteria. PIM use was defined as having collected a minimum of one PIM at least once between July 01 - December 31, 2017. RESULT(S): The numbers of people using one or more PIMs were 7629 (21.7%) according to the Swedish quality indicators, 11,838 (33.6%) according to the EU(7)-PIM list, and 12,002 (34.1%) according to AGS Beers Criteria. Antipsychotics, antithrombotic agents and anxiolytics were the most frequently used PIM class according to the different assessment tools, respectively. The use of PIMs was positively associated with vascular dementia and Lewy body dementia/Parkinson's disease dementia, regardless of

the assessment tool used. However, the association between using at least one PIM and age, sex, MMT-value and frontotemporal dementia, differed depending on the criteria used. CONCLUSION(S): The different results and included PIMs indicate the different perspectives on PIMs between criteria, which make it difficult to compare the results. However, psychotropic drug use requires further highlighting, as well as the association between PIM use and different types of major NCD. Copyright © 2023 The Authors. Published by Elsevier Inc. All rights reserved.

16. Gait Characteristics Associated with Fear of Falling in Hospitalized People with Parkinson's Disease.

Authors: Uhlig, Manuela and Prell, Tino

Publication Date: Jan 18 ,2023

Journal: Sensors 23(3)

Abstract: BACKGROUND: Fear of falling (FOF) is common in Parkinson's disease (PD) and associated with distinct gait changes. Here, we aimed to answer, how quantitative gait assessment can improve our understanding of FOF-related gait in hospitalized geriatric patients with PD. METHODS: In this cross-sectional study of 79 patients with advanced PD, FOF was assessed with the Falls Efficacy Scale International (FES-I), and spatiotemporal gait parameters were recorded with a mobile gait analysis system with inertial measurement units at each foot while normal walking. In addition, demographic parameters, disease-specific motor (MDS-revised version of the Unified Parkinson's Disease Rating Scale, Hoehn & Yahr), and non-motor (Non-motor Symptoms Questionnaire, Montreal Cognitive Assessment) scores were assessed. RESULTS: According to the FES-I, 22.5% reported low, 28.7% moderate, and 47.5% high concerns about falling. Most concerns were reported when walking on a slippery surface, on an uneven surface, or up or down a slope. In the final regression model, previous falls, more depressive symptoms, use of walking aids, presence of freezing of gait, and lower walking speed explained 42% of the FES-I variance. CONCLUSION: Our study suggests that FOF is closely related to gait changes in hospitalized PD patients. Therefore, FOF needs special attention in the rehabilitation of these patients, and targeting distinct gait parameters under varying walking conditions might be a promising part of a multimodal treatment program in PD patients with FOF. The effect of these targeted interventions should be investigated in future trials.

17. Barriers to home exercise for patients with Parkinson's disease: A qualitative study.

Authors: Wang, Q.;Chen, Y.;Li, C.;Li, L.;Cao, H. and Yang, H.

Publication Date: 2023

Journal: BMJ Open 13(2), pp. no pagination

Abstract: Objective This study aimed to explore the barriers to home exercise for patients with Parkinson's disease (PwPDs) and to provide guidelines for healthcare providers to build and implement home exercise strategies for PwPDs. Design A qualitative descriptive method was used. Semistructured interviews were conducted and thematic analysis was employed. Setting The study was conducted at the Department of Neurology at a grade 3 Class A general hospital in China. Participants A total of 24 participants were interviewed, including 10 PwPDs, 7 caregivers, 4 nurses, 1 head nurse, and 2 Parkinson's clinicians. Results Five

themes were identified in this analysis. (1) Psychosomatic stress and low activity; (2) Lack of early rehabilitation authorisation; (3) Poor flow' state of home exercise; (4) inaccessibility of continued service; (5) Sociocultural impact on family coping. Conclusion PwPDs, caregivers and specialised medical staff raised the challenges faced by patients' home exercises from different perspectives. We can improve services and integrate resources through the management of multi-disciplinary, early rehabilitation authorisation, exercise experience, continuous service mode, and family coping strategies under different cultures to gradually adjust the home exercise behaviour of PwPDs. Copyright © 2023 BMJ Publishing Group. All rights reserved.

18. The mediating role of psychological capital between post-traumatic growth and uncertainty in illness among patients with Parkinson's disease.

Authors: Wang, Y.;Song, Z.;Wei, L.;Liu, Y.;Bian, J.;Wang, C. and Wang, S.

Publication Date: 2023

Journal: Geriatric Nursing (New York, N.Y.) 50, pp. 194-202

Abstract: With the application of positive psychology in health management, many studies have confirmed the close relationship between post-traumatic growth, psychological capital and uncertainty in illness. However, there is still a lack of attention to the positive psychology of patients with Parkinson's disease, and previous studies have not clarify the specific relationship. Therefore, the present study sought to explore the multiple mediating roles of psychological capital between post-traumatic growth and uncertainty in illness among patients with Parkinson's disease. We conducted a cross-sectional survey, a total of 268 patients with Parkinson's disease were investigated by the Post-Traumatic Growth Inventory, the Positive Psychological Capital Questionnaire and the Mishel Uncertainty in Illness Scale - Adults from November 2021 to June 2022 in the Parkinson's specialist outpatient department of three 3a-grade hospitals in Tianjin, China. The results showed that the score of post-traumatic growth was (51.78+/-17.872), the score of uncertainty in illness was (68.08+/-17.555), and the score of self-efficacy, resilience, hope, and optimism dimensions of psychological capital were (28.93+/-10.511), (28.79+/-11.553), (27.57+/-8.558) and (25.35+/-9.768). Post-traumatic growth was negatively correlated with uncertainty in illness and positively correlated with all four dimensions of psychological capital (p Copyright © 2023. Published by Elsevier Inc.

19. Young-Onset Parkinson's Disease: Real Data from a Single-Centre Longitudinal Cohort

Item Type: Conference Proceeding

Authors: Bovenzi, R., Conti, M., Degoli, G., Cerroni, R., Simonetta, C., Liguori, C., Salimei, C., Pisani, A., Pierantozzi, M., Stefani, A., Mercuri, N. and Schirinzi, T.

Publication Date: 2022

Publication Details: Neurological Sciences. Conference: 52nd Annual Conference of the Italian Society of Neurology. Milano Italy. 43(Supplement 1) (pp S237); Springer-Verlag Italia s.r.l.,

Abstract: Objective: Parkinson disease (PD) is a neurodegenerative disorder characterized by the loss of dopaminergic neurons of substantia nigra pars compacta (SNc) and the

accumulation of alpha synuclein in several brain regions. Young-onset Parkinson's disease (YOPD) is defined by an age of onset before 50 years. Both pathology and phenotype of YOPD seem to differ from those of typical, Late-onset PD [1]. However, available data are still scarce and almost anecdotal. Accordingly, an in-depth analysis is needed. To retrospectively analyse and shape the course of a YOPD single-centre cohort. Materials: A longitudinal cohort of 193 YOPD patients was selected from a population of 2000 PD patients followed up from 2000 to 2021 at Tor Vergata University Hospital (Rome, Italy). Method(s): For each patient data regarding main demographic and clinical features were collected at onset and at follow up time. Descriptive statistics was run on qualitative and quantitative variables. The course of disease from onset to ten years later in terms of both Hoehn and Yahr (H&Y) stage and levodopa equivalent daily dose (LEDD) was then estimated. Result(s): YOPD had a prevalence of 9.7%, with a genetic origin in 9.3% of cases. It mostly presented as a mainly motor, asymmetric rigidakinetic syndrome. Motor progression in terms of H&Y showed a linear increase of 0.92 points/10 years, whereas the flow of LEDD showed a non-linear trend, with an increase of 526.90mg/day in the first five years, and of 166.83 mg/day from five to ten years. Motor fluctuations affected up to 80% of the cohort, starting after 6.5+/-3.2 years from disease onset. Neuropsychiatric troubles affected the 50% whereas sexual difficulties the 12%. After levodopa initiation, female patients presented levodopa-induced dyskinesias earlier than males (2.71 +/- 1.73 years vs 3.46 +/- 2.73 years, p=0.003). Three female patients (3.4%) reported worsening of motor features during menses. Discussion(s): The analysis of the YOPD cohort showed a "brain-first" PD subtype [2], characterized by slow, linear motor progression, with non-linear dopaminergic requirements. Major burden resulted from motor fluctuations, neuropsychiatric complications and marital issues. Gender-specific motor disturbances emerged. Conclusion(s): This study analysed main features of a large, single-centre, longitudinal cohort, to shape YOPD and detect those elements that might be helpful to develop a tailored approach for such a burdening condition.

20. Comparison of intraoperative imaging guided versus microelectrode recording guided deep brain stimulation for Parkinson's disease: A meta-analysis.

Authors: Chuang, T. C.; Tan, J. Q. and Chen, S. M.

Publication Date: 2022

Journal: Neurocirugia (pagination), pp. no pagination

Abstract: Background: Traditionally, most centers would use microelectrode recording (MER) to refine targeting in deep brain stimulation (DBS) surgery. In recent years, intraoperative imaging (IMG) guided DBS has become an alternative way to verify lead placement. Currently, there is still controversy surrounding the necessity of MER or IMG for DBS. This meta-analysis aims to explore lead accuracy, clinical efficacy and safety between IMG and MER guided DBS for Parkinson's disease (PD). Method(s): PubMed, Embase, Web of Science, Cochrane Library were searched up to Mar, 2021 for studies reporting comparisons between IMG and MER guided DBS for PD. Subgroup analysis was conducted to assess effects of different IMG technology and DBS targeting site. Result(s): Six studies, comprising of 478 patients were included in our analysis. The mean difference between the two implantation techniques in stereotactic accuracy, lead passes per trajectory, improvement% of Unified Parkinson's Disease Rating Scale part III and levodopa equivalent daily dose were -0.45 (95% confidence interval, CI = -1.11 to 0.20), -0.18 (95% CI = -0.41 to 0.06), 3.40 (95% CI = -5.36 to 12.16), and 5.00 (95% CI = -1.40 to 11.39), respectively. No significant differences were observed in each adverse event and operation/procedure time between the two implantation techniques. Conclusion(s): Both IMG and MER guided DBS offered effective control of motor symptoms for PD. Besides, IMG guided is comparable to

MER guided DBS, in terms of safety, accuracy and efficiency. It is recommended for each hospital to select DBS guidance technology based on available resources and equipment. Copyright © 2022 Sociedad Espanola de Neurocirugia

21. Risk and Protection Factors

Item Type: Conference Proceeding

Authors: De Bartolo, M.I., Gialluisi, A., Costanzo, S., Belvisi, D., Falciglia, S., Di Castelnuovo, A., Panzera, T., Donati, M.B., Fabbrini, G., De Gaetano, G., Berardelli, A. and Iacoviello, L.
Parkinson's Disease: a Prospective Population Study

Publication Date: 2022

Publication Details: Neurological Sciences. Conference: 52nd Annual Conference of the Italian Society of Neurology. Milano Italy. 43(Supplement 1) (pp S241-S242); Springer-Verlag Italia s.r.l., pp. S241

Abstract: Background: Several environmental and lifestyle factors have been independently investigated in previous studies on Parkinson's disease (PD) with controversial results, which likely depend on limitations intrinsic to the study design [1,2]. No study has so far prospectively investigated potential risk/protection factors for PD using both linear and nonlinear statistical approaches; the latter may reveal more complex associations and new risk/protection PD factors undetected with linear models. Objective(s): To assess a simultaneous investigation of potential risk/protection factors involved in PD in a large prospective population study, using both classical statistical analyses and machine learning approaches. Material(s) and Method(s): Participants to the Moli-sani Study were enrolled between 2005 and 2010 and followed-up until December 2018. Incident PD cases were obtained by individual-level record linkage to the Regional Hospital Discharge Forms, the Italian register of deaths (both through ICD-9 code = 332) and the Regional Register Prescribing System (through the ATC classification = N04XX; anti-Parkinson drugs). Exposure to potential risk/protection factors were assessed at baseline and during the follow-up. Multivariable Cox PH regressions and survival random forests were built to identify the most influential factors. Result(s): 213 PD incident cases were identified out of 23,901 adult subjects (median (IQR) follow-up 11.18 (2.02) years). Linear association models revealed that age, sex, dysthyroidism, type 2 diabetes and marginally exposure to paints were associated with an increased risk to develop PD, whereas coffee intake predicted a lower PD risk. Both hyperand hypothyroidism were independently associated with PD risk. A Survival Random Forest showed that age was by far the most influential feature on PD risk, followed by coffee intake, daily physical activity and high blood pressure. Discussion(s): This is the first prospective study with a simultaneous assessment of potential protection/risk factors associated with PD through complementary statistical approaches. The study provided novel insights into potential protection/risk factors influencing PD incidence, shading light on the role of dysthyroidism, diabetes, and high blood pressure, which so far showed uncertain relationships with PD, and confirming the relevance of most factors (age, sex, coffee intake and daily physical activity) known to be associated with PD from previous evidence [1,2,3]. Conclusion(s): Our study provided novel insights into the investigation of protection/risk factors associated with PD, opening new strategies to prevent the development of PD.

22. Cognitive parameters can predict change of walking performance in advanced Parkinson's disease - Chances and limits of early rehabilitation.

Authors: Geritz, Johanna;Welzel, Julius;Hansen, Clint;Maetzler, Corina;Hobert, Markus A.;Elshehabi, Morad;Knacke, Henrike;Aleknonyte-Resch, Milda;Kudelka, Jennifer;Bunzeck, Nico and Maetzler, Walter

Publication Date: 2022

Journal: Frontiers in Aging Neuroscience 14, pp. 1070093

Abstract: Introduction: Links between cognition and walking performance in patients with Parkinson's disease (PD), which both decline with disease progression, are well known. There is lack of knowledge regarding the predictive value of cognition for changes in walking performance after individualized therapy. The aim of this study is to identify relevant predictive cognitive and affective parameters, measurable in daily clinical routines, for change in quantitative walking performance after early geriatric rehabilitation. Methods: Forty-seven acutely hospitalized patients with advanced PD were assessed at baseline (T1) and at the end (T2) of a 2-week early rehabilitative geriatric complex treatment (ERGCT). Global cognitive performance (Montreal Cognitive Assessment, MoCA), EF and divided attention (Trail Making Test B minus A, delta TMT), depressive symptoms, and fear of falling were assessed at T1. Change in walking performance was determined by the difference in quantitative walking parameters extracted from a sensor-based movement analysis over 20 m straight walking in single (ST, fast and normal pace) and dual task (DT, with secondary cognitive, respectively, motor task) conditions between T1 and T2. Bayesian regression (using Bayes Factor BF10) and multiple linear regression models were used to determine the association of non-motor characteristics for change in walking performance. Results: Under ST, there was moderate evidence (BF10 = 7.8, respectively, BF10 = 4.4) that lower performance in the TMT at baseline is associated with lower reduction of step time asymmetry after treatment ($R^2_{adj} = 0.26$, $p_{R^2_{adj}} = 0.18$, $p_{10} = 29.9$, respectively, BF10 = 27.9) that lower performance in the TMT is associated with more reduced stride time and double limb support ($R^2_{adj} = 0.62$, $p_{R^2_{adj}} = 0.51$, $p_{10} = 5.1$) that a higher MoCA total score was associated with increased gait speed after treatment ($R^2_{adj} = 0.30$, $p_{10} = 5.1$). Copyright © 2022 Geritz, Welzel, Hansen, Maetzler, Hobert, Elshehabi, Knacke, Aleknonyte-Resch, Kudelka, Bunzeck and Maetzler.

23. Second-line treatment of Parkinson's disease in geriatric medicine. Clinical case

Item Type: Conference Proceeding

Authors: Hamouchi, K., Haouchine, M., Mordac, C., Minouflet, A. and AttierZmudka, J.

Publication Date: 2022

Publication Details: European Geriatric Medicine. Conference: 18th Congress of the European Geriatric Medicine Society. Online. 13(Supplement 1) (pp S410); Springer,

Abstract: Introduction: Geriatric patients with Parkinson's disease are often at an advanced stage. Therefore, the question of initiating second-line treatments is regularly raised. Method(s): Mr S presented the following criteria: More than 5 levodopa doses, 3 h of OFF phase per day and more than 1 h of dyskinesias per day. On the geriatric level: Swallowing disorders, sleep disorders and malnutrition. After presentation of the treatment with levodopa/carbidopa intestinal gel, the patient and his wife gave their consent to start the treatment. The patient was scheduled for a short hospital stay for the catheter placement

and the dosage calculation. Result(s): From the start of treatment, a clear reduction in the OFF phases is first observed. Parenteral nutrition is started after a nutritional assessment of the daily intake. The patient's discharge was prepared with the establishment of a multidisciplinary network and regular monitoring of his evolution under his new treatment. A day hospital is scheduled one month later for assessment. Despite the reticence of the professional community (age of the patient, benefit/ risk ratio, strict compliance with eligibility criteria for second-line treatment not always adapted to geriatric patients), the result obtained with our patient is very satisfactory (according to the patient himself). Conclusion(s): Practical experience in the management of Parkinson's disease in polypathological patients with, in particular, a second-line treatment such as levodopa/carbidopa intestinal gel shows the direct beneficial effect on the pathology and additional beneficial effects (reduction of sleep disorders, behavioural disorders, parenteral nutrition... and improvement in quality of life).

24. Efficacy and Safety of GPi-DBS for Parkinson Disease Patients with Low Body Weight

Item Type: Conference Proceeding

Authors: Kobayashi, M., Ujihara, M., Hirata, S., Takabatake, K. and Fujimaki, T.

Publication Date: 2022

Publication Details: Stereotactic and Functional Neurosurgery. Conference: 19th Biennial Meeting of the World Society for Stereotactic and Functional Neurosurgery, WSSFN 2022. Seoul South Korea. 100(Supplement 1) (pp 244); S. Karger AG, pp. 244

Abstract: Objectives: Subthalamic nucleus deep brain stimulation (STN-DBS) for Parkinson's disease (PD) is an effective and well-established treatment, which will reduce dosages of anti-Parkinson drugs but with close attention and care in some patients. Recently, we have reported that the utmost care and caution will be required especially for PD patients with low body weight and body mass index (BMI) and that globus pallidus interna (GPi) DBS will be a fair alternative for such patients. In this report, we have examined the efficacy of GPi-DBS and postoperative course for PD patients with low BMI retrospectively. Method(s): 36 PD patients who underwent STN- or GPi-DBS were included in this study (mean age 63.3 years old, 18 women). There were 9 PD patients with low BMI less than 20, and four of them underwent STN-DBS and the other four GPi-DBS. We have examined correlation between number of times of attendance to the outpatient department within three months after discharge and possible factors such as body weight, height, BMI, age, preoperative dosage of anti-Parkinson drugs, reduced dosages of the drugs, preoperative UPDRS and duration of the disease. Result(s): After STN-DBS, daily dosage of L-DOPA decreased by 300-350mg while 50-400mg per day after GPi-DBS. The number of attendance in three months after STN-DBS was negatively correlated with body weight and BMI, and positively with L-DOPA dosage/BMI, but not with the dosage of L-DOPA. The average numbers of attendance in three months after STN-DBS were 3.6 for patients with BMI more than 20 and 7.0 for patients with low BMI while 2.8 times for the GPi-DBS patients with low BMI. After GPi-DBS, deterioration of cognitive function was not observed even among elderly patients more than 70 years old. The patients with GPi-DBS also showed reduced feeling of dyspnea and chest tightness in addition to relieves of dyskinesia, wearing off and frozen gait. Conclusion(s): For the PD patients with low BMI, the anti-Parkinson drug dosage per body weight can be relatively higher and thus control or reduction of medication may be troublesome after STN-DBS. GPi-DBS can be a fair and safe alternative for such patients.

25. Grey matter alterations in patients with Parkinson's disease with different sleep disorders.

Authors: Ma, X.;Chen, H.;Li, S.;Liu, H.;Du, W.;Li, C.;Chen, M. and Su, W.

Publication Date: 2022

Journal: Chinese Journal of Neurology 55(9), pp. 950-959

Abstract: Objective To investigate the grey matter alterations of Parkinson's disease (PD) patients with and without sleep disorders, and to explore the relationship between different sleep-related problems and clinical variables as well as grey matter volume (GMV) in PD. Methods Forty-six PD patients and 38 healthy controls (HCs) were recruited from January 2018 to December 2021 in the Department of Neurology, Beijing Hospital. PD patients were divided into PD with sleep disorders (PD-S, n=26) and PD without sleep disorders (PD-nS, n=20) subgroups (cutoff points of 82 for Parkinson's Disease Sleep Scale or less than 5 for each item was considered as an indicator of substantial sleep disorder). The Mini-Mental State Examination (MMSE), the third part of the Unified Parkinson's Disease Rating Scale (UPDRS-III), Hamilton Rating Scale for Anxiety (HAMA), Hamilton Rating Scale for Depression (HAMD), Non-Motor Symptoms Questionnaire (NMSQ), and Parkinson's Disease Questionnaire-39 (PDQ-39) were used to evaluate cognitive function, motor symptoms, anxious and depressive symptoms, non-motor symptoms, and the quality of life of the patients. Optimized voxel-based morphometry was applied to the magnetic resonance imaging brain images in all participants, and multiple linear regression analysis was used to test the correlation between GMV and sleep quality in patients with PD. Results Compared with the HCs, PD-nS patients showed decreased GMV in bilateral limbic lobe, parahippocampal gyrus, amygdala, cingulate gyrus, hippocampus, right cerebellum, bilateral frontotemporal lobe, bilateral occipital lobe and the left parietal lobe. PD-S group exhibited reduced GMV in bilateral limbic lobe, parahippocampal gyrus, amygdala, right cerebellum, bilateral frontotemporal lobe and bilateral parietal-occipital lobe, compared to the HCs. Compared with PD-nS, PD-S patients revealed higher depressive (HAMD score: 12.19 \pm 5.59 vs 6.95 \pm 3.19, $t=-4.01$, $P=0.003$). There was a marked relationship between sleep quality and the reduced GMV of the right medial temporal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.003$), left middle frontal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.002$), the right cerebellum (beta=0.014, 95%CI 0.005-0.023, $P=0.003$), and the right medial occipital gyrus (beta =0.017, 95%CI 0.011-0.024, $P=0.003$). There was a marked relationship between sleep quality and the reduced GMV of the right medial temporal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.003$), left middle frontal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.002$), the right cerebellum (beta=0.014, 95%CI 0.005-0.023, $P=0.003$), and the right medial occipital gyrus (beta =0.017, 95%CI 0.011-0.024, $P=0.003$). There was a marked relationship between sleep quality and the reduced GMV of the right medial temporal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.003$), left middle frontal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.002$), the right cerebellum (beta=0.014, 95%CI 0.005-0.023, $P=0.003$), and the right medial occipital gyrus (beta =0.017, 95%CI 0.011-0.024, $P=0.003$). There was a marked relationship between sleep quality and the reduced GMV of the right medial temporal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.003$), left middle frontal gyrus (beta =0.006, 95%CI 0.002-0.010, $P=0.002$), the right cerebellum (beta=0.014, 95%CI 0.005-0.023, $P=0.003$), and the right medial occipital gyrus (beta =0.017, 95%CI 0.011-0.024, $P=0.003$). Conclusions Sleep disturbance is common in PD, which is related to the anxious and depressive symptoms, non-motor symptoms, and the quality of life. PD patients with different sleep disorders show grey matter alterations in several brain regions, which are associated with sleep quality,

26. Does hospitalisation increase the risk of antipsychotic initiation in persons with Parkinson's disease?

Item Type: Conference Proceeding

Authors: Pirttila, A., Tiihonen, M., Paakinaho, A., Hartikainen, S. and Tolppanen, A.M.

Publication Date: 2022

Publication Details: European Geriatric Medicine. Conference: 18th Congress of the European Geriatric Medicine Society. Online. 13(Supplement 1) (pp S144); Springer,

Abstract: Introduction: Antipsychotic use is common in persons with Parkinson's disease (PD), although it can lead to the worsening of symptoms. Clozapine and quetiapine are the only antipsychotics recommended in PD treatment guidelines. Information on factors associated with antipsychotic initiation is needed. Hospitalizations are more common in people with PD and may be associated with antipsychotic initiation. We investigated whether recent hospitalization is associated with antipsychotic initiation in persons with PD, and whether discharge diagnoses differ between initiators and noninitiators. Method(s): Nested case-control study in the nationwide register-based Finnish Study on Parkinson's disease (FINPARK), including 22,189 community dwellers with clinically verified PD diagnosed during 1996-2015. The cases were 5,088 persons who initiated antipsychotics after PD diagnosis, identified with one-year washout period. The controls were 5,088 age-, sex-, and time from PD diagnosis matched noninitiators. Recent hospitalization was defined as discharge in the two-week period preceding the matching date (antipsychotic initiation). Associations were investigated with conditional logistic regression. Result(s): Quetiapine was the most commonly initiated antipsychotic (72% of initiators), followed by risperidone (15%). Clozapine was rarely used (1.1%). Recent hospitalization was strongly associated with antipsychotic initiation (61.2% of initiators and 14.9% of controls, OR 9.42, 95% CI 8.33-10.65). PD was the most common discharge diagnosis category in cases and controls (51.2% and 33.0% of hospitalized cases and controls, respectively), followed by mental and behavioural disorders (9.3%) and dementia (9.0%) among initiators. Conclusion(s): Our findings suggest that in persons with PD, antipsychotics are commonly initiated during or after hospitalization.

27. A review of healthcare professionals' knowledge of Parkinson's disease and its treatment in an inpatient setting

Item Type: Conference Proceeding

Authors: Reidy, C., Connolly, E., Murphy, A., Pope, G., Cooke, J., Bambrick, P., O'Regan, N. and Mulcahy, R.

Publication Date: 2022

Publication Details: European Geriatric Medicine. Conference: 18th Congress of the European Geriatric Medicine Society. Online. 13(Supplement 1) (pp S225); Springer,

Abstract: Background: Studies have shown that patients with Parkinson's disease (PD) have a higher rate of hospitalization and longer lengths of stay than their age matched

controls. Patients with PD are often on multiple time sensitive medications. This study aims to assess healthcare workers knowledge of PD, the medications used to treat it and how they should be prescribed and administered. Method(s): A convenience sample survey was distributed to health care professionals over a five-week period. This survey included multiple choice questions and open-ended short answer questions. Results were analysed on Microsoft Excel. Result(s): 71 surveys were returned-34 from doctors, 23 from nurses and 14 others from pharmacists, physiotherapists and dieticians. Sinemet was the most recognised PD medication (n = 68) with only 11 participants (15%) correctly identifying all PD medications listed. 32 participants (45%) were unable to correctly identify when to administer PD medications in relation to mealtimes. 29 participants surveyed (41%) would consider inserting a nasogastric tube (NGT) for a patient who was fasting and unable to take oral medications. 12 participants (17%) did not know that Sinemet could be given via NGT. Conclusion(s): Results of this survey highlight a lack of knowledge around PD and its management. This was particularly evident around timing of PD medication, and the management of patients who are fasting. Results suggest that there is a role for hospital specific PD medication with the aim of improving patient outcomes.

28. Electro-acupuncture on Vascular Parkinsonism with multiple sleep disorders: A Case Report

Authors: Yan, M., Fan, J., Li, Y., Liu, X., Yu, Z. and Zhuang, L.

Publication Date: 2022

Publication Details: Switzerland:

Abstract: Vascular Parkinsonism (VP) is a kind of rare secondary Parkinsonism caused by vascular lesions. Patients with VP experience not only movement disorders but also sleep disorders. But treatment options are limited and often associated with undesirable adverse effects. Electro-acupuncture (EA) is a safe, rapid work, easy operation, and convenient complementary replacement therapy. We report a case of a 51-year-old man who presented with VP and multiple sleep disorders. Based on clinical evaluation and nocturnal hospital-based polysomnography (PSG), the patient had severe PLMD (PSG showed severe periodic leg movements), excessive daytime sleepiness (EDS, the score of the ESS is 16), and probable rapid eye movement sleep disorder (RBD). Parkinson's disease sleep scale (PDSS) score, Pittsburgh sleep quality index (PSQI), and periodic leg movements index were 93, 11, and 135.2, respectively. After 8 weeks of EA treatment, the patient reported that the symptoms of subjective and objective sleep disturbance were significantly alleviated without any discomfort. This case report may provide a new alternative and complementary therapy for VP patients with sleep disturbance but more definitive and robust evidence is needed to support its efficacy. Copyright © 2022 Yan, Fan, Li, Liu, Yu and Zhuang.

Sources Used:

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