



**VA** | U.S. Department  
of Veterans Affairs

**NATIONAL VA PARKINSON'S DISEASE  
CONSORTIUM**  
*Education · Collaboration · Advocacy*

# **THE TRANSMITTER**

*November 2020*

## **Article Reviews**

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### **A New MRI Measure to Early Differentiate Progressive Supranuclear Palsy from De Novo Parkinson's Disease**

The magnetic-resonance parkinsonism index (MRPI) has been validated as an imaging biomarker to differentiate progressive supranuclear palsy (PSP) from idiopathic Parkinson disease. A 2018 update to this index includes third-ventricular width as one measure. The MRPI requires expert imaging reconstruction and measurement and is not practical for routine clinical use. These authors constructed a simpler measure – the third-ventricle width/internal skull diameter ratio (3rd/ID). This study included 76 early-stage PSP patients from one center in Milan, and 82 patients with idiopathic Parkinson disease from the PPMI database, along with 133 controls from PPMI, all of whom had undergone 1.5 or 3T MRI. Using an axial slice, taken just below the level of the corpus callosum, the width of the mid-portion of the third ventricle was measured and compared to the internal skull diameter. Age, sex, and disease duration were controlled. Patients with PSP had higher 3<sup>rd</sup>/ID ratios. Area of the ROC curve for their initial cohort was 94.3%. Using a cutoff ratio of 5.72, PPV was 80% and NPV was 83%. There was no significant difference between the 3<sup>rd</sup>/ID ratio of controls and patients with idiopathic Parkinson disease. Over 4 years of follow-up, there was no increase in 3<sup>rd</sup>/ID ratios in patients with Parkinson disease. Limitations in the study include the absence of pathological confirmation of diagnosis, and differences in baseline age and cognitive function which the authors attempted to control through regression models. The authors conclude that the 3<sup>rd</sup>/ID ratio could be a useful adjunctive clinical biomarker in differentiating Parkinson disease from PSP.

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### **Levodopa Versus Dopamine Agonist After Subthalamic Stimulation in Parkinson's Disease**

Following subthalamic nucleus deep brain stimulation (STN-DBS), it is common practice to reduce dopaminergic medications by between approximately 50% to avoid dyskinesia. The extent and timeframe of this reduction, and the priority of which agents to reduce first, have not been studied. These authors sought to determine whether using monotherapy with dopamine agonist or levodopa following STN-DBS lead to differences in various clinical outcomes over a 2.5 year follow-up period. 35 patients were randomized post-operatively to sinemet vs. agonist monotherapy. Inclusion criteria included disease duration greater than 5 years, age less than 70, and absent psychiatric disease and dementia. Treatment was unblinded, and evaluation

by an independent clinician was blinded. Medications were weaned over a maximum of 4 weeks. Patients were seen every week for 8 weeks and medications were adjusted or added as indicated. Primary outcome was the total score on the Non-motor Symptom Scale. Secondary outcomes were maintenance of monotherapy, UPDRS II, III, and IV, PDQ-39, and apathy/anxiety/depression scales. There was no difference in the primary outcome at 3 or 6 months. There were only a few differences in secondary outcomes: (1) patients assigned to dopamine agonist monotherapy had higher apathy scores but better sleep and fewer symptoms of restless leg syndrome (2) patients assigned to levodopa monotherapy had more dyskinesias (3) the majority of patients assigned to receive dopamine agonist monotherapy required levodopa after 3 months, and by 2.5 years no patients remained on agonist monotherapy; in contrast the majority of patients assigned to receive levodopa monotherapy remained on levodopa monotherapy. The authors conclude that dopamine agonist monotherapy following STN-DBS is not clinically feasible, and that any minimal improvement in non-motor symptom control (sleep, RLS) is balanced by a higher risk of side effects.

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### **Synergy of pandemics-social isolation is associated with worsened Parkinson severity and quality of life**

Social isolation and loneliness (intimate, social, and collective/community loneliness) are associated with poor health outcomes in the elderly population. For patients with Parkinson disease, changes in communication from hypophonia/dysarthria, changes in mobility, and social anxiety stemming from the visibility of symptoms and disease stigma can contribute to social isolation. There have been few studies examining the effects of social isolation and loneliness on patients with PD. This was a cross-sectional observational study using previously collected baseline data from 1527 participants with idiopathic Parkinson disease. Quality of life and social-isolation were measured using the PROMIS Global scale, and loneliness measured using two true/false statements (“I am lonely”, “I have a lot of friends”). The primary outcome measures were scores on the PRO-PD scale (an online-only, patient-reported, slider-based symptom scale). A positive response to “I am lonely” and negative response to “I have a lot of friends” were both associated with lower quality-of-life scores, more rapid disease progression, and higher symptom-severity scores as measured by the PRO-PD scale. These effects were of similar magnitude to that of daily exercise. These data suggest that monitoring for social isolation and loneliness as a predictor of disease severity and potential progression has clinical utility. In light of these findings, the COVID19 pandemic presents salient challenges to social functioning for Parkinson patients and this demands attention from both caregivers and the health-care team.

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## **Committee Activities**

### **Clinical Care Committee**

- **Rotation of Committee Chair:** Leadership for the clinical care committee rotates amongst the PADRECCs. The Portland PADRECC leads the committee for November and December. The committee meets via conference call the first Tuesday of the month at 12pm (EST)
- **Standardize and Optimize Clinical Care:** The committee continues to discuss latest research on PD, new treatment strategies and a variety of clinical issues to improve patient care and outcomes. It also serves to

provide clinical support to the consortium network by focusing on measures to standardize clinical care across the PADRECC network. Recent agenda items have included discussions on:

1. Discussion regarding COVID 19 pandemic-clinical challenges and solutions, including the need for enhanced assessment and aggressive treatment of depression using tele-technology amongst the home confined patients across the nation.
2. Discussion about Cala Trio Device for the management of essential tremor. This device is now available upon request through the Prosthetics Service.
3. Updates on clinical experience with newer medications – Nourianz (Adenosine Receptor antagonist), Gocovri and Imbrija Inhaler
4. Discussion about newly approved medications including apomorphine sublingual film (KYNMOBI).
5. Discussion about involvement with ongoing Levodopa Pump study – NeuroDerm
6. Clinical experience with newer DBS systems including Boston Scientific’s “Vercise” and Abbott’s “ St. Jude Medical Infinity DBS”.
7. CSP # 2015 Trial, planning and trial initiation related matters.
8. Discussion about implementation of the Neurology Cube – a national VA web-tool that will enable us to visualize population-level data obtained from the electronic medical record on VA patients with Parkinson’s disease.

## **Education Committee**

- **National VA PD Consortium Bi-Annual Meeting-** due to Covid 19 pandemic meeting will be held virtually on **January 29<sup>th</sup>, 2021**. More details to follow.
- **PADRECC/EES Movement Disorder Series:** The first audioconference for FY 21 was held on **November 12, 2020 “An Approach to the Patient with Chorea”** presented by Dr. Ruth Walker, Director of the Movement Disorders Clinic, Department of Neurology, James J. Peters VAMC, Bronx; Professor, Department of Neurology, Mount Sinai School of Medicine, NYC.
- **FY 2021 Education Needs Assessment-** being developed to determine education needs of consortium members, usefulness of current programs/resources offered (Transmitter, MDS, Newsletter, Website, patient resources etc.) and guide future education initiatives. The goal is to electronically send out January 2021
- **PD at Home:** Monthly PD telephone education/support group conference for patients and caregivers available nationwide on the 2<sup>nd</sup> Tuesday of each month: 10am PT, 11am MT, 12p CT, 1pm ET.
- **VHA/PADRECC & The Parkinson’s Foundation Partnership:** Goal of the partnership is to improve the care and quality of life for Veterans living with PD through collaborative education, research and services. This committee will be spearheading many of the projects planned for this partnership
- **National Website Maintenance:** The committee performs periodic maintenance checks of the National Website to ensure information is current and up-to-date.

- **PADRECC Transmitter:** This committee continues to assemble and distribute this *e*-newsletter every other month.
- **Resources available on the National Website:**
  - **Patient Education Brochures-** <https://www.parkinsons.va.gov/patients.asp>
    - Exercise and Physical Activity
    - Fall Prevention
    - PD Medications
    - Motor Symptoms
    - Non-Motor Symptoms
    - Agent Orange and Toxic Exposures and PD (*being updated*)
  - **My Parkinson's Story-**<https://www.parkinsons.va.gov/patients.asp>  
A series of short videos prepared by the VA PADRECCs addressing various aspects of Parkinson's disease.
  - **Suggested Education Essentials for Veterans with PD** <https://www.parkinsons.va.gov/patients.asp>
  - **Updated Resource Request Form-**PADRECC staff and consortium members can order bulk supply of FREE educational materials from PF and APDA. Please click on the following website link and complete the ***Resource Request Form*** and fax or email to address listed:  
<https://www.parkinsons.va.gov/clinicians.asp>
  - **PADRECC Pocket Card:** *Parkinson's Disease Quick Reference Guide for Imitating Therapy* is available on the National Website:  
<https://www.parkinsons.va.gov/Consortium/PocketCard/PocketCard19.pdf>

## Dates to Remember

### **November 12, 2021**

#### **EES/PADRECC Movement Disorders Series**

Topic: TBA

<http://www.parkinsons.va.gov/>

### **January 29, 2021**

#### **National VA PD Consortium Meeting**

Philadelphia, PA

### **April 17-23, 2021**

#### **American Academy of Neurology - Annual Meeting**

San Francisco, CA (in person) & Virtual Component

<https://www.aan.com/conferences-community/annual-meeting/>

**September 19, 2021 - September 23, 2021**

**International Congress of Parkinson's Disease and Movement Disorders**

Location: Copenhagen, Denmark

<https://www.mdscongress.org/Congress/Program--Abstracts/View-Past--Future-Congresses.htm>