



THE TRANSMITTER

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Article Reviews

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A Cerebellar Wave for Paroxysmal Dyskinesia

PKD, Paroxysmal kinesigenic dyskinesia is the most common paroxysmal movement disorder. Symptoms usually precipitated by sudden movements and manifest more commonly as dystonia, as ballismus, and transient chorea. Loss-of-functional mutations in the PRRT2 gene are the most frequent cause of isolated PKD.

PRRT2-PKD being characterized by an exquisite response to carbamazepine (and other voltage-gated sodium channel blockers). The impressive response to antiepileptic drugs has always intrigued neurologists, but a recent study reveals how PRRT2 interacts with sodium channels leading to an unexpected disease mechanism. These discoveries revealed that cerebellar SD (spreading depolarization) is a possible disease mechanism. By showing that sodium channel blockers reduce the voltage-gated sodium channel-related hyperexcitability caused by PRRT2 loss, the authors clarify why carbamazepine and other antiepileptic agents are so effective in PRRT2-PKD.

As the SD wave travels, its front is characterized by an increase in extracellular potassium ([K]_e). Authors recorded activity of Purkinje Cells (PCs, the main output cells of the cerebellar cortex) during SD while recording simultaneously [K]_e.

At last, they support the concept that dystonic movements may emerge in cerebellar circuits and not directly because of basal ganglia dysfunction. The link between paroxysmal movement disorders, aura-like sensations, and migraine troubled clinicians and researchers for decades. SD may be the unifying link between these manifestations shared across PRRT2-PKD-, ATP1A3-, and PNKD/MR-1-related paroxysmal nonkinesigenic dyskinesia.

Movement Disorders: Vol 36; Issue 12; Pages 2767-2767

Specialist palliative care for Parkinson's disease

There is an increasing role for specialist palliative care in the overall care for people with PD, and their families. Palliative care allows us to reduce suffering and improve quality of life. This review article summarizes recent insights into the importance of involving palliative care in our patients with Parkinson's Disease. Patients, and their families, with Parkinson's disease (PD) and related disorders face many issues, including physical, psychological, social, spiritual, ethical and decisions making issues, and at the end of life. Palliative care is an essential part of care from the time of diagnosis and should be provided by all services involved with the patient and family. This would be in a collaboration with other services— both neurology and primary care—so that a

palliative care approach can be available for all patients from diagnosis, with specialist advice and support for the more complex issues. The authors concluded that there is a need for all services to adapt to these challenges, but with the aim of improving the quality of life (QOL) of patients and families, supporting the professional teams and enabling patients to be as fully involved in the decisions about their care and at the end of life.

Oliver, D., and Veronese, S., (2020), Specialist palliative care for Parkinson's Disease. **Annals of Palliative Medicine**, Feb. 9(supp 1), S52-S62, <http://dx.doi.org/10.21037/apm.2019.12.01>

Bilateral Focused Ultrasound Thalamotomy for Essential Tremor (BEST-FUS Phase 2 Trial)

Essential tremor (ET) is a prevalent condition in which, despite the best medical therapy, approximately 30%–50% of patients remain disabled by difficulties with writing, eating, and drinking. In patients with medically refractory essential tremor, unilateral magnetic resonance–guided focused ultrasound thalamotomy can improve contralateral tremor. However, this procedure does not address ipsilateral symptoms. In this study the authors aimed to determine whether bilateral thalamotomies can be performed with an acceptable safety profile where benefits outweigh adverse effects. Ten patients were analyzed. The study met both primary outcomes, with the intervention resulting in clinically significant improvement in quality of life at 3 months (mean Quality of Life in Essential Tremor score difference, 19.7; 95%CI, 8.0–31.4; P=0.004) and all patients reporting that they would elect to receive the second-side treatment again. Tremor significantly improved in all patients. Seven experienced mild adverse effects, including 2 with transient gait impairment and a fall, 1 with dysarthria and dysphagia, and 1 with mild dysphagia persisting at 3 months. The authors conclude that Staged bilateral magnetic resonance–guided focused ultrasound thalamotomy can be performed with a reasonable safety profile similar to that seen with unilateral thalamotomy and improves the tremor and quality of life of patients with essential tremor. Longer-term follow-up and continued accrual in the phase 3 trial will be required to validate these findings.

Iorio-Morin, C., Yamamoto, K., Sarica, C., Zemmar A., Levesque, M., Brisebois, S., et al (2021), Bilateral Focused Ultrasound Thalamotomy for Essential Tremor (BEST-FUS Phase 2 Trial). **Movement Disorders** 36 (11), 2653-2662.

Committee Activities

Clinical Care Committee

- **Rotation of Committee Chair:** Leadership for the clinical care committee rotates amongst the PADRECCs. The Southeast/Richmond PADRECC leads the committee for January/February. 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.
 2. Exploring new diagnostic procedures especially Syn-One test – evidence review and use in the PADRECC/VA

3. Clinical experience and comparative use of three available DBS systems including Boston Scientific's "Vercise", Abbott's "Infinity", and Medtronic's "Percept" within the six PADRECCs
4. CSP # 2015 Trial, planning and trial initiation related matters.
5. Updates on clinical experience with PD medications –Kynmobi, Inbrija, Rytary, Artane
6. Discussion around using palliative care in PADRECC clinics

Education Committee

- **PADRECC/EES Movement Disorder Series-Webinar:** knowledge-based webinars to provide VHA healthcare professionals with current practice standards and emerging trends in the treatment of Parkinson's disease and other movement disorders. CEs are typically provided for the live webinars. Check out the following link for a list of past webinars and if you are interested in receiving a recording of a past webinar please email Gretchen.gleenn@va.gov and list the date/topic of interest:
https://www.parkinsons.va.gov/Consortium/Presentations/Audio_Conference/MDS.asp

Registration is **OPEN for the [Movement Disorders Series Part 1-Webinar](#) being held on **February 10th 9:00am-1:00pm PST and 12:00pm-4:00pm EST**. Topics include: PD 101, Whole Health, Beyond PD and Exercise. The following accreditations are being offered: JA IPCE, ACCME, ACCME-NP, ACPE, ANCC, APA, NYSED-P, ASWB, NYSED, APTA, AOTA, & ASHA.

To register click [here](#)

- **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. We are now one year into the partnership and much of the foundational work has been done. This committee continues to spearhead many of the projects 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
 - **PADRECC Support/Education Groups:** The PADRECCs are now holding virtual groups open to Veterans and care partners interested in attending. Please check out the National Website for listing of dates/times and contact person to register for the groups and please share with your patients/care partners: <https://www.parkinsons.va.gov/patients.asp>
 - **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>
- **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

February 10th, 2022 --

EES/PADRECC Movement Disorders Series Part 1-Webinar

Topics: PD 101, Whole Health, Beyond PD and Exercise

Click [here](#) to register

April 2-7, 2022

American Academy of Neurology - Annual Meeting

Seattle, Washington

[Annual Meeting: World's Premier Neurology Meeting | AAN](#)

April 27th, 2022

WEBINAR- PD 101 for Nurses

Save the Date: more information coming soon

July 4-7, 2023

6th World Parkinson Congress

Barcelona, Spain

[World Parkinson Congress \(wpc2023.org\)](http://wpc2023.org)