

VA

U.S. Department of Veterans Affairs

Veterans Health Administration
Parkinson's Disease Research,
Education & Clinical Centers**NATIONAL VA PARKINSON'S DISEASE****C O N S O R T I U M***Education · Collaboration · Advocacy*

THE TRANSMITTER

January 2024

Article Reviews

Prepared by: Debra Lindsey, ACNP-BC, Mark Baron MD, and Cynthia Greenacre, PhD ~ Southeast/Richmond PADRECC

Focused Ultrasound Thalamotomy for Tremor in Parkinson's Disease: Outcomes in a Large, Prospective Cohort

Transcranial magnetic resonance-guided focused ultrasound (MRgFUS) thalamotomy offers an attractive alternative to DBS, by avoiding the need for invasive surgery and surgical implants. MRgFUS thalamotomy is becoming increasingly popular as a treatment for ET, but is also utilized for PD tremor, in particular for those with more severe tremor or with contraindications for surgery. In this study the authors focused on patients with PD, reporting on a cohort of 48 patients treated with unilateral FUS between 2019-2023 at Brigham and Women's hospital who were followed for variable periods of up to 3 yrs. Similar to reports for ET patients undergoing FUS, patients experienced major benefits on tremor (with improvements of upwards of >70%) and improved rigidity, though not benefiting bradykinesia. As for reports in ET patients, PD patients not uncommonly experienced side effects, though they were considered mild and in particular involved gait imbalance or sensory deficits. Although these features were not uncommon, more recent reports and experience in ET patients, suggest that with repositioning the thalamic target, much of these side effects may be avoidable. Also, going forward, the advent of higher resolution MRI scans also should permit more accurate targeting and thereby further reduce the incidence of side effects. Continued extensive reporting of outcomes will be important to assist physicians and patients in choosing among potential interventions.

Melissa M.J. Chua MD, Sarah E. Blitz BS, BA, Patrick R. Ng MD, David J. Segar MD, Nathan J. McDannold PhD, P. Jason White PhD, Sarah Christie PA-C, Michael T. Hayes MD, John D. Rolston MD, PhD, G. Rees Cosgrove MD, FRCSC
Focused Ultrasound Thalamotomy for Tremor in Parkinson's Disease: Outcomes in a Large, Prospective Cohort. *Movement Disorders* Volume 38, Issue 10 October 2023 Pages 1962-1967 <https://doi.org/10.1002/mds.29569>

Seeing ophthalmologic problems in Parkinson disease

According to study findings published in NEUROLOGY, patients with Parkinson's Disease are more likely to experience visual disorders that interfere with driving, daily living and quality of life while contributing to gait instability and falls risk. Yet, study authors also note that symptoms are

underreported by patients and often overlooked or undertreated by their physicians. Vision disorders such as dry eye, difficulty adjusting to changing light levels, diminished oculomotor control, contrast sensitivity, color vision and visuospatial construction were common and perhaps even to be expected given the impact on neuromuscular control, retinal dopamine depletion and decreased dopaminergic innervation of the visual cortex caused by Parkinson's Disease.

The study aimed to determine the prevalence of visual symptoms in a sample of persons with Parkinson's (n=848) compared to controls (n=250) through a questionnaire that focused on four domains according to ocular structures: ocular surface, intraocular, oculomotor and optic nerve. In the study findings, researchers found that 82% of people with Parkinson's (95% CI, 80%-85%) reported 1 or more ophthalmologic symptoms, compared with 48% of controls (95% CI, 42—54) ($P < .001$). Additionally, people with Parkinson's reported more vision and eye problems across all 4 domains than controls ($P < .001$), indicated by a higher total questionnaire score among people with Parkinson's (median [interquartile range (IQR)] = 10 [13]) than controls (median [IQR] = 2 [5]; $P < .001$). In PwP with ophthalmologic symptoms, 68% (95% CI, 65%-71%) reported that it interfered with daily activities, compared with 35% of controls (95% CI, 29%-41%) ($P < .001$).

Many of the named visual conditions in this study, while significantly impacting quality of life, are treatable. Study author Carlijn Borm, MD, highlights the frequency of visual issues in the study population and the importance of vision screening within Parkinson's Disease communities.

Borm CDJM, Visser F, Werkmann M, et al. Seeing ophthalmologic problems in Parkinson disease [published online March 11, 2020]. *Neurology*. doi: 10.1212/WNL.0000000000009214

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 treatment strategies, new medications and other procedures, and other clinical issues to improve patient care and outcomes across the national PADRECCs service area. It also serves to provide clinical support to the consortium network by focusing on procedures and measures to standardize clinical care across the PADRECC network.
- Recent agenda items have included:
 1. Future planning to enhance clinical service provision at PADRECCs : Suggestions and Strategies
 2. Discussion of new therapies in the pipeline and possible use in the VA in the future
 3. Discussion of DBS management and surgical programs at the PADRECCs

4. Role of MRI guided focused ultrasound thalamotomy in the management of essential tremor and Parkinson's disease

Education Committee

- **PADRECC/EES Movement Disorder Series-Webinars:** 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.glenn@va.gov and list the date/topic of interest: https://www.parkinsons.va.gov/Consortium/Presentations/Audio_Conference/MDS.asp
 - **Save-the-Date: Movement Disorders Series Part V-Atypical Parkinsonism**
March 7th, 2024 12pm-4pm EST *registration link coming soon!*
- **Parkinson's Disease Rehab-Community of Practice on Microsoft Teams-** collaboration with rehabilitation subject matter experts across the VA with interest in PD to develop this COP to address and enhance rehabilitation care for Veterans with PD and similar conditions. The goal of the platform is to share evidence-based knowledge to inform PD-specific rehabilitation practices, provide access to up-to-date resources, program success and opportunities for improvement. All are welcome to join:
https://teams.microsoft.com/l/channel/19%3a_NAJNcVxoyd5XB0M_UnwK4Ym7vi8C971TC0xqerdf1%40thread.tacv2/General?groupId=bf9f6fc8-06da-401e-99c5-6dd0b47494ee&tenantId=e95f1b23-abaf-45ee-821d-b7ab251ab3bf
- **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.