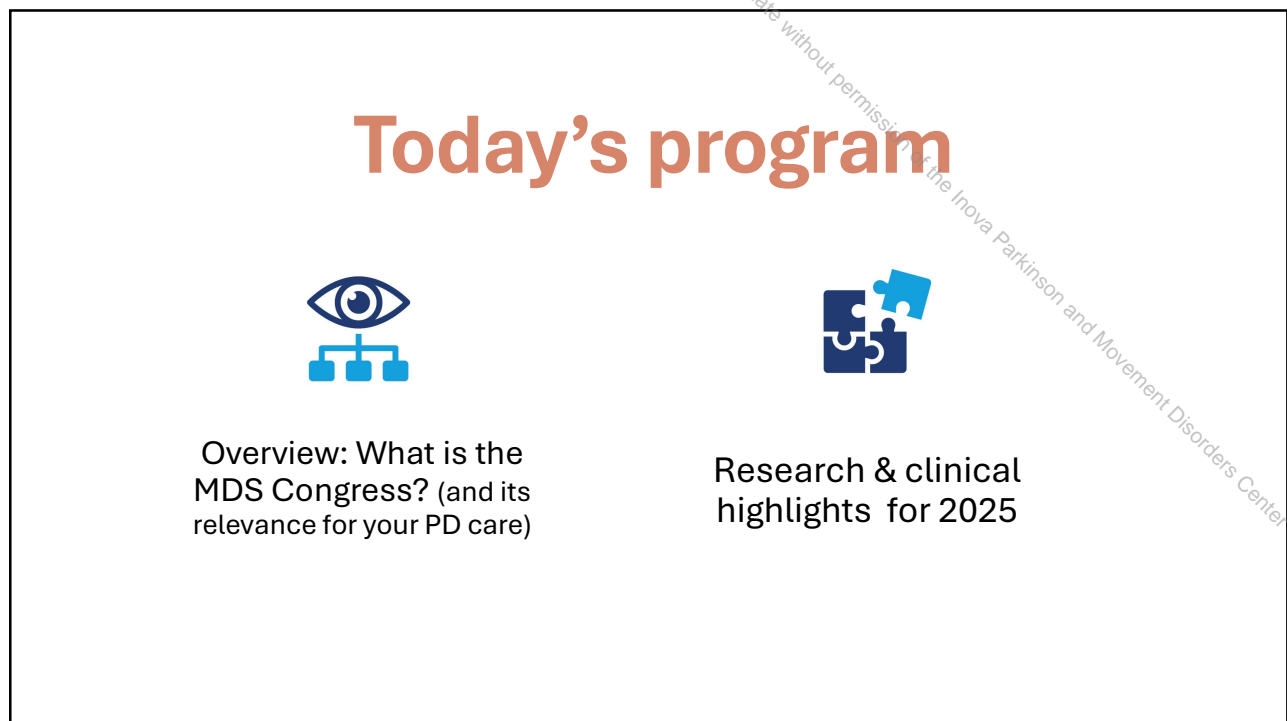




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2

www.movementdisorders.org

International Parkinson and Movement Disorder Society

Membership **Resources** Education Publications Events About MyMDS

International Parkinson and Movement Disorder Society®

More than 12,000 clinicians, scientists and other healthcare professionals dedicated to improving care for some of the most challenging disorders through education and research.

[Join MDS](#) [Log in](#)

Featured Highlights

Upcoming: *Movement Disorders* Journal Symposium

Explore the Neurobiology of Parkinson's

Pan American Parkinson's Disease and Movement Disorders Congress

February 13 - 15, 2026
Houston, Texas, USA

Attend the 6th Pan American Congress

Join hundreds of colleagues in Houston,

2025 plenary sessions: On demand now

Watch recordings of top scientific sessions

3

International Congress of Parkinson's Disease and Movement Disorders®

mdscongress.org

Final Program

Honolulu, Hawaii, USA

October 5-9, 2025

International Congress

Largest educational program for Parkinson's and movement disorders healthcare providers

Annually

- In addition to regional congresses and educational programs

This year: **3750** participants

4

Overview of activities



Regional Assemblies



Welcome Ceremony



Business meetings



MDS Keynote lecture & Clinical Breakthroughs



MDS Video Challenge



Networking Events

5



6

Exhibits and Sponsored sessions



Exhibits

Browse booths from a variety of companies and nonprofits in the movement disorders field.



Corporate Therapeutic Symposia

Learn the latest in therapeutics in these 60-minute, company-led informational sessions (Non-CME).



Innovation Showcases

Discover interesting advancements in these 30-minute, company-led presentations (non-CME).

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Educational sessions

- **State of current practice**
- **Coming research**
- **Topics of interest**, including controversial topics
 - Incl. Programs for allied healthcare providers

Accredited Scientific Sessions

2025 International Congress Theme: Toward Disease Modification in Movement Disorders
The Congress Scientific Program Committee selects a theme each year that is highlighted throughout the meeting. Themed sessions are designated in the program.



Plenary Sessions

These sessions provide an overview of the latest clinical and basic science research findings and state-of-the-art information relating to topics of broad interest within the field of Movement Disorders.

Controversies in Movement Disorders

This plenary session is designed to stimulate interest and open debate among a panel of experts. Panelists will discuss preselected "hot" topics, addressing each issue from several angles.

Highlights in Movement Disorders
Faculty will review the latest developments of the last year in hyperkinetic and hypokinetic disorders, focusing on clinical and basic science areas.

Presidential Lectures

Recognizes exceptional contributions in the field. Honorees share the research and topics that have most interested them through their storied careers.

Movement Disorders Grand Rounds
MDS experts will examine both common and rare movement disorder patients. The audience will learn how they formulate diagnoses and manage these interesting and challenging patients.

Therapeutic Plenary Sessions

An overview of the latest, state-of-the-art options for the diagnosis and management of movement disorders. Watch for expert insights on relevant topics in each of the presented sessions.

Breakout Sessions

Parallel Sessions

An in-depth translational view of clinical and basic research findings, state-of-the-art multi-disciplinary treatment approaches, and future strategies on a variety of focused topics within the field.

Teaching Courses

Up-to-date information on the clinical and basic science of select relevant topics. The sessions are unique in providing a syllabus that includes a review of the topic and the presentation slides.

Applied Skills Sessions

Practical illustrations of techniques relevant to Movement Disorders through video examples and faculty demonstrations.

Video Sessions

Video demonstrations to educate and challenge participants to expand their clinical skillset and approach to unusual patients.

Interactive Applied Skills or Video Sessions will feature interactive audience participation and discussion with presenters.

Panel Discussion A panel of experts will engage in a dynamic discussion, offering insights, critical reflections, and forward-looking perspectives on the topics presented.

www.movementdisorders.org

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Today's program



Overview: What is
the MDS Congress?
(and its relevance)



**Research & clinical
highlights for 2025**

9



10

Suggested approach for pharmacological management of early PD



Individualized treatments: No “one-size-fits-all” – combine pharmacologic therapy with lifestyle and non-pharma interventions.



Escalation: Do **not delay** adding or switching to **L-dopa** if other therapies fail to control symptoms or side effects become problematic.



When to Start Treatment: “Don’t delay” approach generally preferred, but a “wait & watch” may be reasonable until functional disability develops.



Dosing Strategy: Use **lowest effective L-dopa dose** providing adequate benefit (ideally <300–400 mg/day) and may consider combination with L-dopa-sparing agents.



First-line Therapy: **L-dopa** is usually the **first choice**. Start low and go slow.

(In younger (<60 years), milder symptoms, few comorbidities, and low risk for side effects (SEs) → consider dopamine agonist or MAO-B inhibitor to try and delay motor response complications (benefits in 1st to ~5 years).



Follow up: Ensure **regular monitoring & follow-up** for treatment efficacy and side effects.

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Medication choice should be based on:

Patient preference



Non motor symptoms & Comorbidities



Occupation / Lifestyle



Age



Severity



Type



12

The NEW ENGLAND JOURNAL of MEDICINE

EDITORIALS



When to Start Levodopa Therapy for Parkinson's Disease

Susan Bressman, M.D., and Rachel Saunders-Pullman, M.D., M.P.H.

- There is **no evidence that early initiation** of levodopa slows progression of the disease; on the other hand, there is **no reason to delay** therapy when it is clinically indicated.
- Treatment that is guided by **clinical need** and that uses the **lowest dose that provides a satisfactory clinical effect.**



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Strategies to improve L-dopa action



- Add an **adjunctive** agent
- ↑ **L-dopa** (individual dosages, or frequency if there are motor fluctuations)



- Take L-dopa on an **empty stomach** (i.e., at least ½ hour prior to meals)



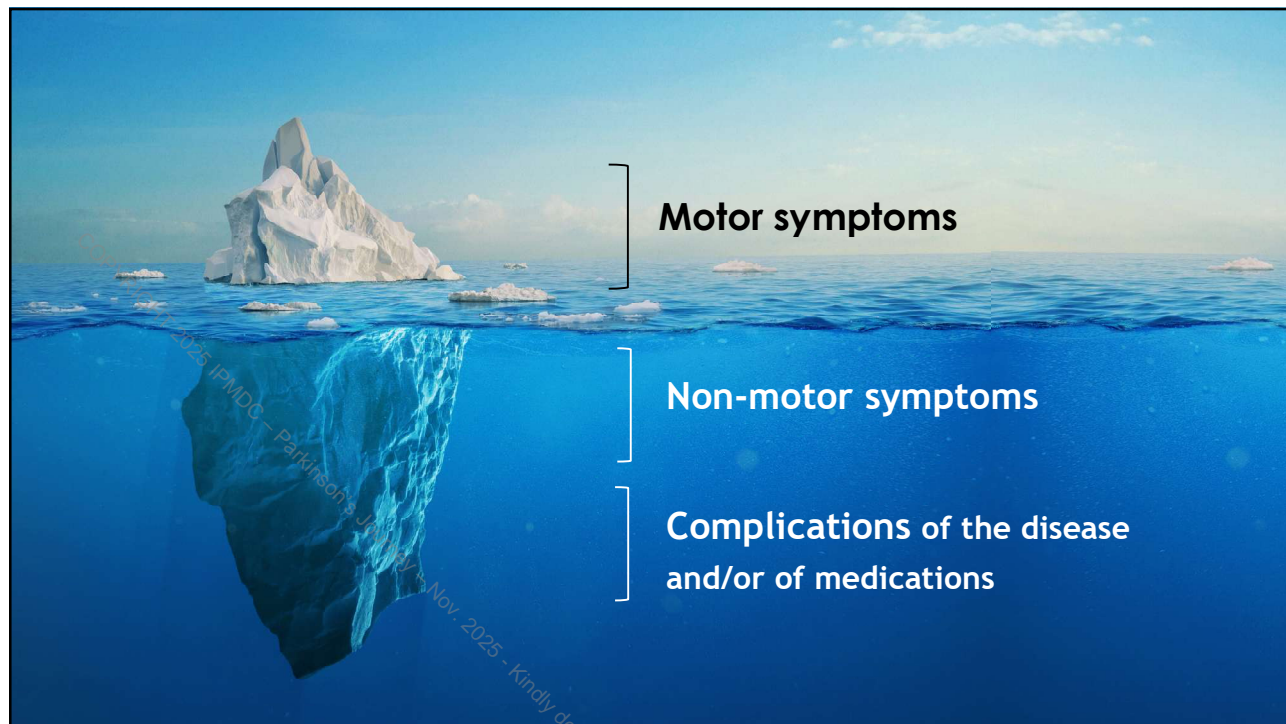
- Manage **constipation**



- L-dopa can be **crushed** and taken with an **acidic** drink (e.g., orange juice or effervescent Vitamin C) to improve/speed up drug absorption

Beckers M, Bloem BR, et al. *NPJ PD*. 2023.; Rusch C et al. *NPJ PD*. 2023; Tan AH, Lim SY, et al. *MDJ*. 2020.

14



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Most bothersome PD related symptoms (0-6y)

TABLE 2. Rank of the 24 most bothersome PD related symptoms/conditions in 92 early patients with up to 6 yr of disease duration

Rank	Symptom/condition	Total score	First choice %	Second choice %	Third choice %	3-Choice complaint prevalence (%)
1	Slowness	112	32.6	5.4	13.0	51.1
2	Tremor	101	29.3	8.7	4.3	42.4
3	Stiffness	76	6.5	26.1	10.9	43.5
4	Pain	50	9.8	9.8	5.4	25.0
5	Loss of smell/taste	30	3.3	9.8	3.3	16.3
6	Mood	28	4.3	6.5	4.3	15.2
7	Handwriting	18	2.2	3.3	6.5	12.0
8	Bowel problems	17	2.2	3.3	5.4	10.9
9	Sleep	15	2.2	4.3	1.1	7.6
10	Appetite/weight	13	0.0	3.3	7.6	10.9
11	Restless legs	11	1.1	1.1	6.5	8.7
12	Sexual dysfunction	10	2.2	1.1	2.2	5.4
13	Urinary problems	9	1.1	2.2	2.2	5.4
14	Fluctuating response to medication	8	1.1	2.2	1.1	4.3
15	Drooling	7	1.1	1.1	2.2	4.3
–	Sweating	7	0.0	1.1	5.4	6.5
17	Hallucinations/delusions	6	0.0	1.1	4.3	5.4
–	Memory	6	0.0	2.2	2.2	4.3
19	Compulsive behavior	5	1.1	1.1	0	2.1
20	Falls	4	0.0	1.1	2.2	3.2
–	Freezing	4	0.0	1.1	2.2	3.2
–	Speech	4	0.0	1.1	2.2	3.2
23	Fatigue	3	0.0	1.1	1.1	2.2
–	Swallowing	3	0.0	1.1	1.1	2.2
Other		5	0.0	1.1	3.3	4.3

SLOWNESS
TREMOR
STIFFNESS
PAIN

Politis M et al.. Mov Disord. 2010 Aug 15;25(11):1646-51

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Most bothersome PD-related symptoms (more than 6y)

TABLE 3. Rank of the 24 most bothersome PD related symptoms/conditions in 173 advanced patients with more than 6 yr of disease duration

Rank	Symptom/condition	Total score	First choice %	Second choice %	Third choice %	3-Choice complaint prevalence (%)
1	Fluctuating response to medication	115	15.0	8.1	5.2	28.3
2	Mood	96	7.5	12.1	8.7	28.3
3	Drooling	85	10.4	6.9	4.0	21.4
4	Sleep	83	9.8	5.2	8.1	23.1
5	Tremor	67	8.1	5.2	4.0	17.3
6	Pain	60	6.4	5.8	4.0	16.2
7	Bowel problems	46	4.0	4.0	6.4	14.5
8	Urinary problems	40	2.9	5.2	4.0	12.1
9	Falls	39	4.0	4.0	2.3	10.4
10	Appetite/weight	36	2.3	4.6	4.6	11.6
11	Slowness	34	3.5	3.5	2.3	9.2
12	Fatigue	31	2.3	2.9	5.2	10.4
13	Sexual dysfunction	29	4.6	1.2	0.6	6.4
14	Hallucinations/delusions	26	2.3	2.9	2.3	7.5
–	Restless legs	26	1.7	2.9	4.0	8.7
–	Speech	26	1.2	3.5	4.6	9.2
17	Compulsive behavior	25	3.5	1.2	1.7	6.4
18	Handwriting	23	2.3	1.7	2.9	6.9
–	Loss of smell/taste	23	1.7	1.7	4.6	8.1
–	Sweating	23	1.2	2.9	4.0	8.1
21	Stiffness	22	1.2	3.5	2.3	6.9
–	Swallowing	22	0.0	4.6	3.5	8.1
23	Freezing	21	2.3	1.7	1.7	5.8
–	Memory	21	1.2	1.7	5.2	8.1
Other		19	0.6	2.9	3.5	6.9

FLUTUATION IN MEDS
MOOD
DROOLING
SLEEP

Politis M et al.. Mov Disord. 2010 Aug 15;25(11):1646-51

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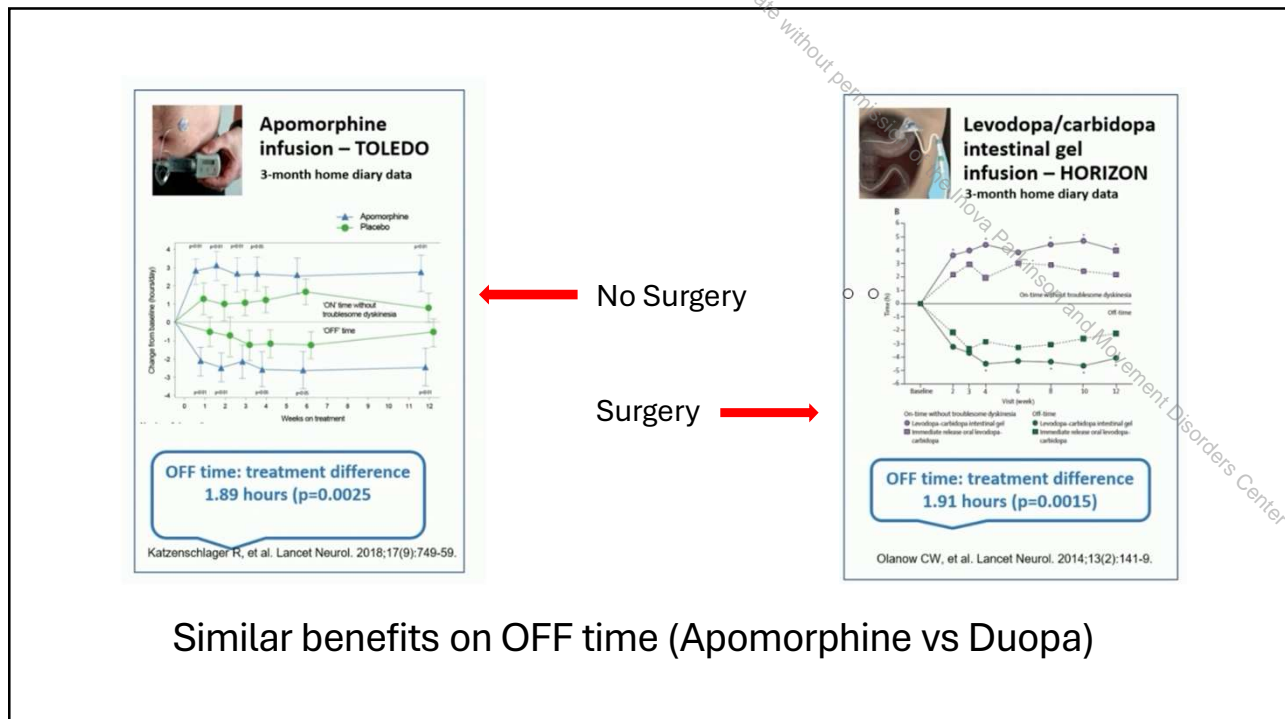
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Pump Formulations

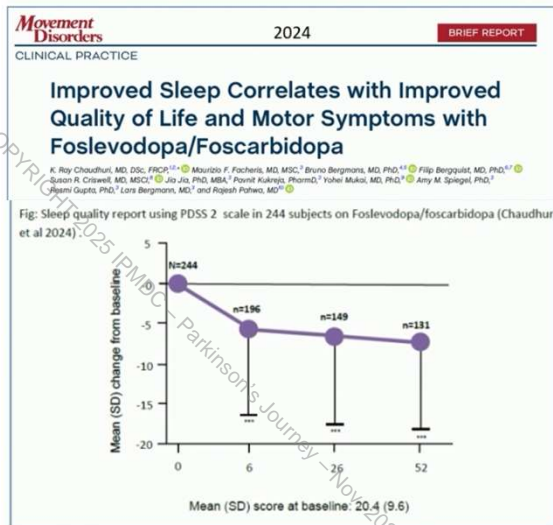



- Foscarbidopa/Foslevadopa pump (Vyalev®)
- Apomorphine (multiple names depending on the region)
- Duopa/Duodopa

19



20



Only
Foscarbidopa/Foslevadopa
can be used for 24hrs

21

DBS Vs Focused Ultrasound (FUS)

- Guidelines still strongly favor DBS
- Early outcomes seems similar
- But some adverse events (AE), including dysarthria
 - AEs are initially higher than in DBS
 - And may persist due to permanent nature of the ablative surgery
 - No bilateral options (yet?)

GAP & CONTROVERSY

Bilateral Lesions in Parkinson's Disease: Gaps and Controversies

Maria C. Rodriguez-Oroz, MD, PhD,^{1,2} Raul Martinez-Fernandez, MD, PhD,³ Neil Lujman, MD, PhD,⁴ Shiro Horioka, MD, PhD,⁵ and Elena Moro, MD, PhD⁶

TARGET	Bilateral DBS	Bilateral RF ablation	Bilateral OK ablation	Bilateral MRgFUS ablation
Globus pallidus internus	Offer to eligible patients (e.p.)	Do not offer	Do not offer	Do not offer
Thalamic Vim	Offer to eligible patients (e.p.)	Do not offer	Do not offer	Do not offer
Subthalamic nucleus	Offer to eligible patients (e.p.)	Do not offer	Do not offer	Do not offer
Pallido-thalamic tract	Offer to eligible patients (e.p.)	Do not offer	Do not offer	Do not offer

Legend:
 Offer to eligible patients (e.p.)
 Consider offering to e.p.
 Experimental, requires more studies before offering
 Do not offer
 Not applicable / no studies

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JAMA Neurology

Original Investigation

Staged Bilateral MRI-Guided Focused Ultrasound Subthalamotomy for Parkinson Disease

Raúl Martínez-Fernández, MD, PhD^{1,2,3}; Elena Natera-Villalba, MD^{1,4}; Rafael Rodríguez-Rojas, PhD^{1,3}; [et al](#)

Bilateral FUS? Not yet!

- Even when staged (separated by ~3.4 years), 4 of 6 individuals experienced speech changes
- 2 of 4 had these issues persisting one year after surgery

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Scientific Program

Sunday, October 5, 2025

Day 1 Session 1!

08:00 – 09:30 Therapeutic Plenary Session 1101

Comprehensive Care in Parkinsonism: Beyond Medication

Ballroom ABC, Level 4

In this session, the faculty will discuss a comprehensive, non-pharmacological approach to symptom management from early to advanced stages of parkinsonism. Practical recommendations on timing, dosage and intensity of exercise and rehabilitation will be presented.

At the conclusion of this session, participants should be better able to:

1. Discuss the evidence of dietary and lifestyle interventions as well as cognitive behavioral therapy on long-term outcomes and disease progression in Parkinson's disease
2. Analyze the symptomatic and disease-modifying effects of exercise and how to prescribe exercise in Parkinson's disease
3. Discuss the evidence on personalized rehabilitation planning including optimal intensity, dose and timing of rehabilitation prescription and the impact of rehabilitation on disease progression

Themed Session

Focus: Clinical

Recommended Audience: Clinician/General Neurology, Fellow/Resident/Student, Health Professional (non-physician), Industry, Researcher/Basic Science

Recommended Education Level: Beginner/Foundational, Intermediate/Experienced, Advanced/Expert

Chairs:

Ai Huey Tan, Malaysia
Elina Tripoliti, Greece

Presenters:

Setting the Scene: From Diagnosis to Self-Empowerment

Michele Hu, United Kingdom

Evidence-Based Approach to Exercise in Parkinson's Disease

Natalie Allen, Australia

Evidence-Based Approach to Rehabilitation in Parkinsonism

Alice Nieuwboer, Belgium

CSPC Liaisons:

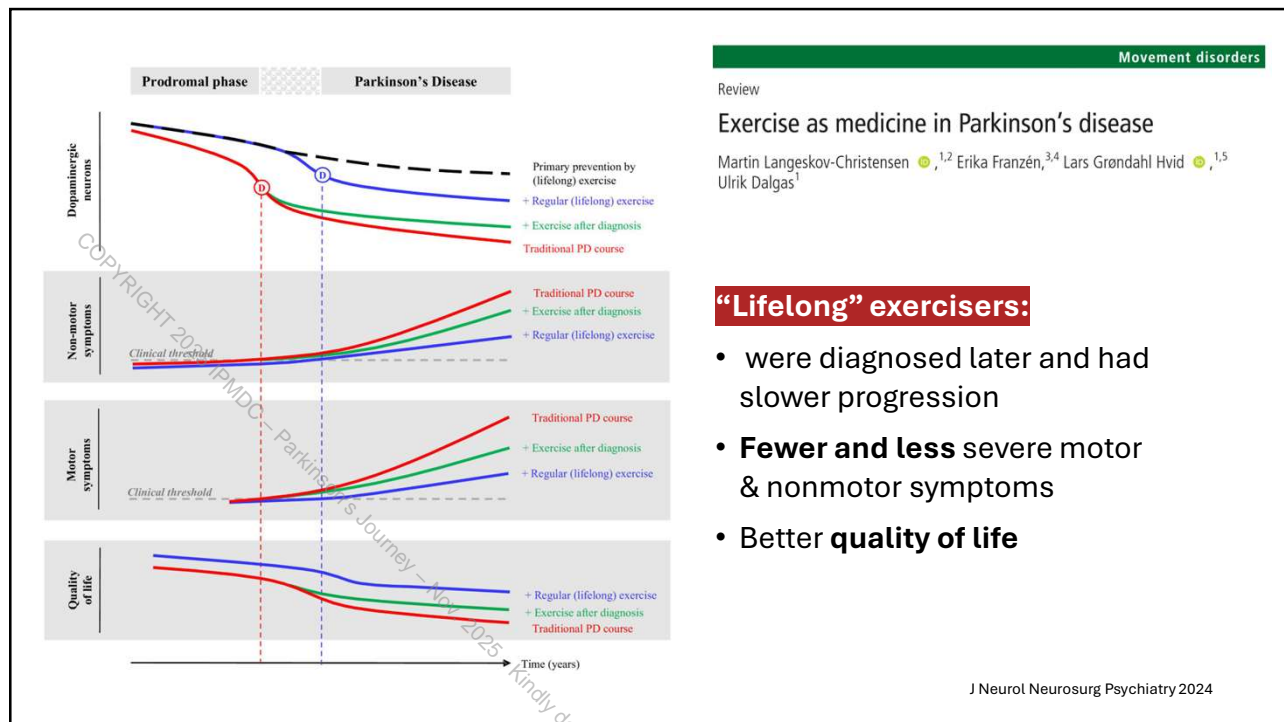
Michiko Bruno, USA
Elina Tripoliti, Greece

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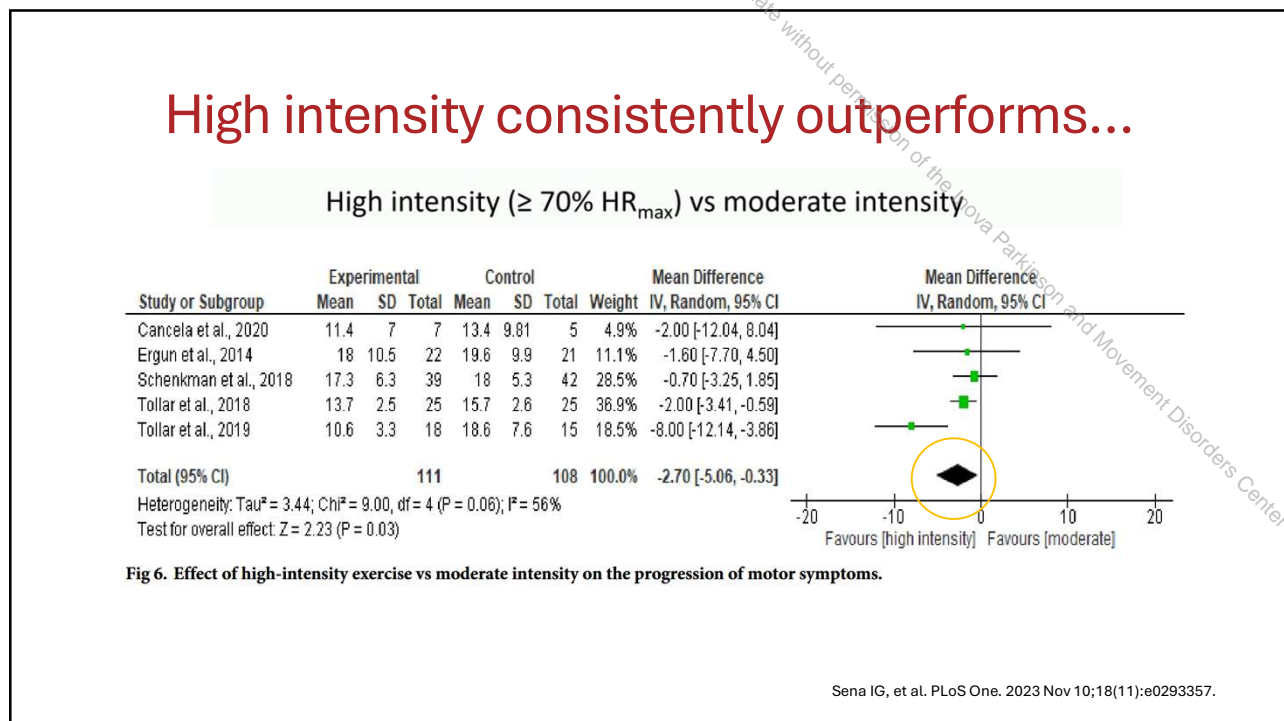
Key themes: **Exercise** continues to be King.



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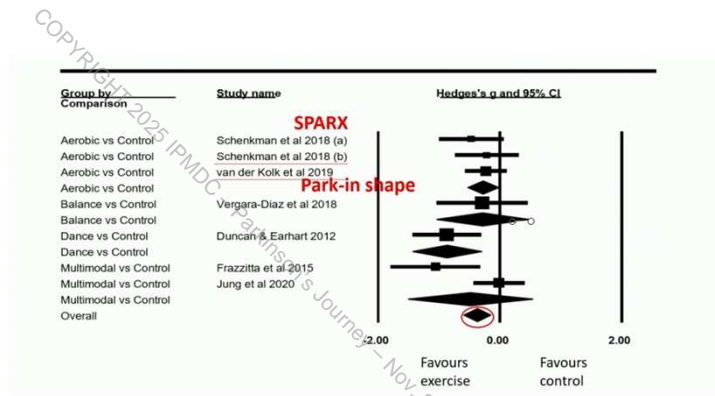


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Benefits extend to times when the pills aren't working. Exercise attenuates "OFF" disease severity measures



A meta-study of multiple high-intensity exercise interventions improves motor scores, **even in the off state.**

Li, Neurorehab Neural Rep, 2023

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30



Slow-SPEED-NL

- Currently **recruiting** 600 individuals at higher risk of getting Parkinson's (due to genetic mutations or RBD).
- Increase physical activity over the next 2 years using a motivational app and wearable (which also captures activity data as well as self-reported symptoms)
- Imaging and blood-based biomarkers

31

SPARX3 (Study in Parkinson Disease Exercise)

- Phase III of a large, ongoing exercise dosage study, comparing moderate to high intensity treadmill walking (4x/wk for 18 months)
- 370 “deNovo” People with Parkinsons
 - Standardized measures + DaTscan + blood biomarkers



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Cycle-II

- Live or prerecorded spin classes
 - Encouragement to increase effort
- High intensity training (3X wk for twelve months)
- n=256 (H & Y I-III)



PTJ: Physical Therapy & Rehabilitation Journal | Physical Therapy, 2021;101:1-10
<https://doi.org/10.1083/ptj.2020.191>
 Advance access publication date August 6, 2021
 Protocols



Effectiveness of a Long-Term, Home-Based Aerobic Exercise Intervention on Slowing the Progression of Parkinson Disease: Design of the Cyclical Lower Extremity Exercise for Parkinson Disease II (CYCLE-II) Study

Jay L. Alberts, PhD^{1,2,*}, Anson B. Rosenfeldt, PT, DPT, MBA¹, Cielita Lopez-Lennon, PT, DPT³, Erin Suttman, BS³, A. Elizabeth Jansen, MPH¹, Peter B. Imrey, PhD^{4,5,6}, Leland E. Dibble, PT, PhD, FAPTA³

¹Department of Biomedical Engineering, Cleveland Clinic, Cleveland, Ohio, USA

²Center for Neurological Restoration, Cleveland Clinic, Cleveland, Ohio, USA

³Department of Physical Therapy and Athletic Training, University of Utah, Salt Lake City, Utah, USA

⁴Department of Quantitative Health Sciences, Cleveland Clinic, Cleveland, Ohio, USA

⁵Mollen Center for Multiple Sclerosis Treatment and Research, Cleveland Clinic, Cleveland, Ohio, USA

⁶Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, Ohio, USA

*Address all correspondence to Jay L. Alberts at: alberts@ccf.org

Downloaded from <https://ptj.sagepub.com>

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Diet is Queen



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Promising results in human trials



- Multicenter, randomized, controlled, double-blinded trial (N = 74) over 12 wks.
- Proinflammatory cytokine TNF- α plasma levels decreased with active arm (and increased with placebo)
- No changes in SCFAs levels
- Resulting reductions in “time-to-on” and improved NMS scale scores in PwP (esp. experiencing constipation).

37

nature medicine



Article

<https://doi.org/10.1038/s41591-025-03602-0>

Immune and metabolic effects of African heritage diets versus Western diets in men: a randomized controlled trial

A two-week study showed that a rapid shift from an African heritage diet to a Western diet

- Caused significant inflammation
- Weakened immune responses
- Activated disease-related biological pathways
- Similarly, switching from WS to AHD showed noticeable improvement in several days

Typical “Western” diet increases disease factors

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Long-Term Consumption of Ultraprocessed Foods and Prodromal Features of Parkinson Disease

Strong link between high intake of ultra-processed foods (UPF) and beverages and prodromal Parkinson's

- 43,000 individuals over 26 years
- 5 cohorts
 - Highest =11+ servings of UPF per day, the lowest < 3
- Monitored for the first appearance
 - RBD
 - Constipation
 - Depression
 - Body pain
 - Impaired color vision
 - Excessive daytime sleepiness
 - Reduced smelling capacity

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Ketone Esters – A novel supplement?

- 14 subjects given Ketone Ester supplement drink or the “control”
 - Endurance with high intensity stationary bike increased ~24% with the KE drink
 - Reduced carbohydrate-dependent metabolism
 - VO₂ max trended upwards but was not statistically significant

Figure 1

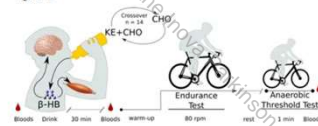
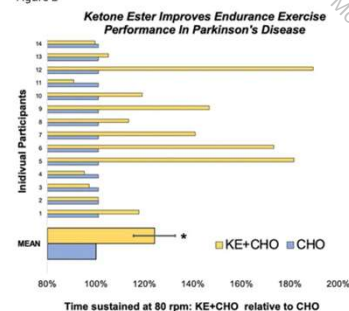


Figure 2



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AI is everywhere

Machine Vision,
Machine
Listening, and
other pattern
recognition

In the clinic with
AI “Scribes” and
documentation
support

Extending into
the home with
apps and
wearables

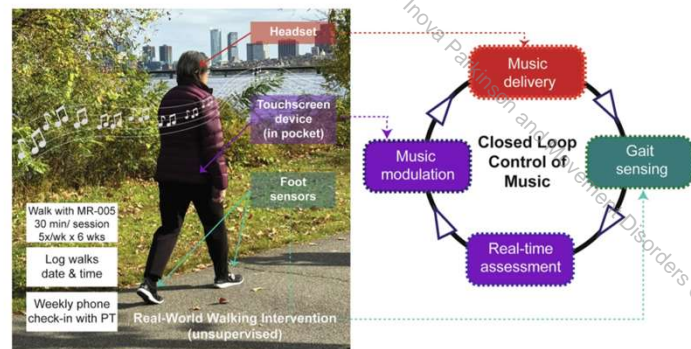
(We'll cover this topic in-depth in an upcoming session on tech and other innovations)

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Amped-PD

- App plays music and recognizes your tempo, and then gradually pushes the tempo up to increase intensity
- If the user gets off-tempo, it reduces speed and recalibrates and resumes the process

C. Amped-PD Intervention

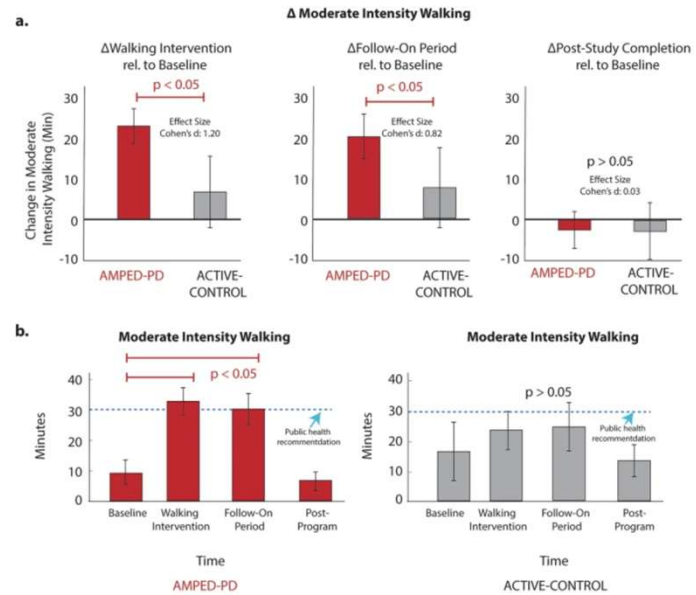


a Components of MR-005 autonomous rhythmic auditory stimulation system. b Instructions on independent use of MR-005 system. c Self-managed real-world walking program. Informed consent was obtained for the use of participant images in the figure.

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Key takeaways

- Only those using the device were able to get to the 30 min a day/5x a week of moderate intensity
- And when the device was removed, they went back to premorbid levels (actually, worse than before).



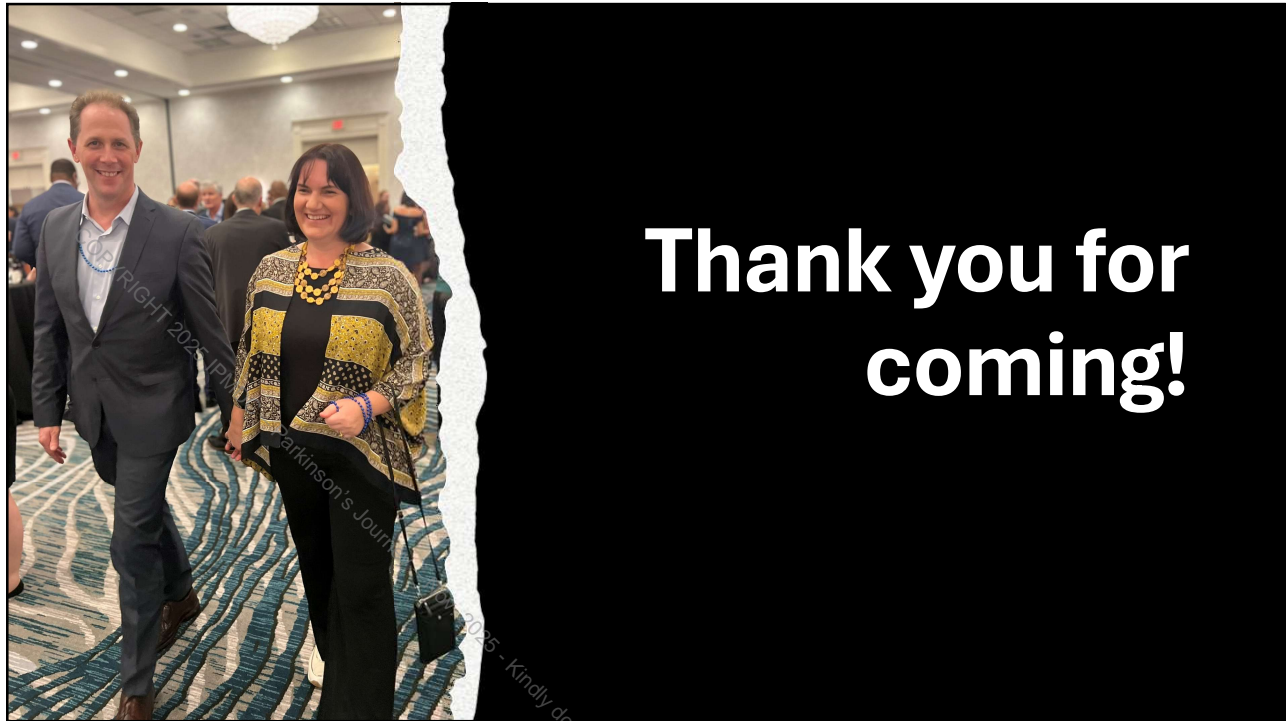
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