



DECEMBER 2023 Barbara Marquardt, Editor, M.Ed., MCHES, WCP, RYT

DECEMBER MEETING—Wednesday, December 1, 2023 – 2:15 p.m. We welcome Dr. Umar Shuaib from the Cleveland Clinic Movements Disorders Department. He has been with The Clinic since 2019 and will talk on updates with Parkinson's for the year 2023.

Cleveland Heights Senior Activity Center/One Monticello Blvd., Cleveland Heights, OH 44118

From David Brandt

In the spirit of Thanksgiving and the holiday season, it is a reminder of my time to give my 2023 thanks to various individuals and organizations. So here we go. Many thanks to:

- The Michael J Fox Foundation, Parkinson's Foundation, Davis Phinney Foundation, and all of the other foundations that are related to Parkinson's Disease and who provide so much information and research dollars that they are changing the landscape.
- To all of the advances in research in PD including the Parkinson's Disease Biomarker being found which will provide every person with PD expecting improved care and treatments and newly diagnosed individuals potentially never advancing to full blown symptoms.
- Bob and Barbara Eckardt who have year in and year out provided the hospitality at our meetings including all of the coffee and refreshments. We are deeply appreciative.
- The fact that we have two large hospital organizations in our area (Cleveland Clinic and University Hospitals) that provide exceptional PD care, research and guidance.
- My fellow *PEP* Board members; Shalom Plotkin, Mazie Adams, Kathy Wendorff, Pat Murphy, and Darlene Reid for their guidance.

- Barbara Marquardt, the Editor of the PEP News, and Katherine Kaminski, who puts it together monthly and for all of their hard work and a job well done.
- InMotion, who gives Northeast Ohio a one of kind in the country support organization for people with PD. We are so lucky to have them here.
- The Ohio Parkinson Foundation Northeast Ohio Region (OPFNE) and it's leader, Kathie Stull, for all of the good things they do for the Parkinson community and also for their generous monetary support to make the *PEP* News sent to you every month.
- To all of the speakers that take their time voluntarily to speak at our monthly meetings. We thank you for passing on your knowledge.
- The Peters Charitable Foundation who provides *PEP* with a grant every year that allows us to do our job of providing support and information.
- All of the other donors to *PEP*, both small and large, that find value in what we do.
- To my mom, Marilyn Brandt, who ran this group for so many years and to this day, still acts as a greeter at our meetings.
- And finally, all of the caregivers of those with PD. A very challenging job that they do so lovingly and often without the proper appreciation!

I wish all of you a very Happy Holiday Season!!

Parkinson's Disease Question Corner

Email: barbaramarquardt@outlook.com

Question: As this year comes to an end, do you know of a new device or technology that is helpful for Parkinson's?

Answer: Yes, and I am excited to share with you about a couple devices from the company **SYMBYX Biome**.

SYMBYX Biome targeted photobiomodulation devices directly address the gut, vagus nerve and brain - sites of potential inflammation and dopamine production, promoting oxygen-rich blood flow. Infrared light therapy not only alleviates some of the chronic pain associated with Parkinson's, but also bolsters nerve resilience against painful stimuli.

The first device from **SYMBYX Biome** is called, **SYMBYX PDCare** which is the world's first-ever medically approved laser for Parkinson's symptoms that you can use at home. It is researched-backed with currently 8,000+ peerreviewed scientific studies reporting on the incident-free, protective, and restorative benefits of photobiomodulation therapy.

SYMBYX Biome's medical-grade PDCare laser makes light therapy easy to apply across the bare skin of your abdomen in the comfort and convenience of your own home. PDCare can show benefits in energy, sleep, improvements in digestion, walking, balance, facial expression, sense of smell, mood, pain and tremor. Typically, symptom relief is individual, and may be seen in 10-12 weeks of use.

SYMBYX Biome photobiomodulation involves a clinically tested protocol of super-pulsed, near infrared light therapy which achieves biochemical reactions in the body:

- Stimulates cellular energy production (ATP)
- Reduces pain and inflammation
- Encourages metabolism of short-chain fatty acids (SCFAs), such as butyrate
- Promotes dopamine signaling
- Strengthens the gut-brain connection
- Improves the integrity of the gut lining, reducing "leaky gut" issues

The second device from **SYMBYX Biome**, is called the **SYMBYX Neuro**.

DISCLAIMER: The material contained in this newsletter is intended to inform. *PEP* makes no recommendations or endorsements in the care and treatment of Parkinson's disease. Always consult your own physician before making any changes. No one involved with the newsletter receives financial benefit from any programs/products listed. The **SYMBYX Neuro** is a red-light therapy and infrared light therapy helmet that delivers non-invasive and painless light energy at a specific wavelength. It is a portable and rechargeable photobiomodulation treatment for convenient use at home or on the go as well. It is backed by clinical data, and **SYMBYX Neuro** has undergone extensive safety testing.

Automatically treats for a total of 24 minutes with a:

- 12-min. cycle of red-light therapy (635 nm) followed by a
- 12-min. cycle of infrared light therapy (810 nm)
- Pulsed at 40 Hz which is equivalent to the frequency of gamma brainwaves facilitating executive planning, processing speed and mood

Unlike other transcranial devices, SYMBYX Neuro helmet:

- Focuses light therapy treatment on the upper neck and back of the head, also known as the posterior part of the skull. This is an area rich in neurons with close proximity to the brainstem and the vagus nerve, a critical part of the gut-brain connection.
- Uses both red-light therapy and infrared light therapy wavelengths. Red light therapy targets the superficial structures and networks, and primes them to com municate more effectively with deeper brain tissues, nerves and blood vessels. Infrared light therapy also targets these deeper structures.

Some of the benefits of SYMBEX Neuro include:

- Reinforces gut-brain connection, as highlighted in the <u>BMC Neurology Study</u>
- Increases blood flow to the brain
- Energizes cells
- Independent clinical research using the **SYMBYX Neu ro** helmet has shown specific improvements in facial expression, hand-eye and foot coordination, gait and tremor.
- By stimulating the brain's natural gamma waves, the **SYMBYX Neuro** may improve: mental acuity, con entration, executive planning, decision making, problem solving and brain fog.
- Some users report improved sleep, and stress manage ment

For device questions please visit: https:// symbyxbiome.com/pages/contacts Please view all safety precautions and contraindications by visiting: https://symbyxbiome.com/pages/safetyprecautions-contraindications Email: info@symbyxbiome.com Ref.: https://symbyxbiome.com

PD Risk Seen as Elevated with Diabetes, or Poor Glucose Control

(Excerpt from parkinsonsnewstoday.com)

n elevated risk of PD has been found among people with type 2 diabetes — a condition marked by excess glucose sugar levels in the blood because the body cannot make enough insulin. Insulin, a protein hormone, helps to control glucose levels, suggesting a potential relationship between glucose control and neurodegeneration.

Newer classes of glucose-lowering drugs are increasingly used to treat type 2 diabetes due to their ability to reduce the risk of cardiovascular and kidney disease. Such medications include glucagon-like peptide-1 receptor (GLP-1R) agonists, dipeptidyl peptidase-4 (DPP4) inhibitors, and sodium-glucose co-transporter-2 (SGLT2) inhibitors.

A recent study showed that Parkinson's risk was 36-60% lower in diabetic patients receiving GLP-1R agonists or DPP4 inhibitors compared with other therapies. Building on such findings, several GLP-1R agonists approved to treat type 2 diabetes were evaluated for their ability to slow Parkinson's progression.

For example, the medication lixisenatide showed a potential to slow progression of Parkinson's motor symptoms in a Phase 2 trial. Liraglutide, approved to treat type 2 diabetes and obesity, improved patients' mobility and activities of daily living.

However, the long-acting GLP-1R agonist NLY01 failed to slow motor symptoms in adults with early and untreated PD in another Phase 2 study. Scientists at the University of Florida further investigated connections between glucose-lowering drugs and Parkinson's risk by combining the results of controlled trials, called a meta-analysis. These studies included people with and without type 2 diabetes, evaluating Parkinson's risk was not their intent.

A database search yielded 24 clinical trials involving a total of 185,305 adults, with a mean age of 65.1, who were randomly assigned either a glucose-lowering drug or a placebo. Among them, 20 studies enrolled type 2 diabetes patients only, and four involved participants with or without diabetes. Five of these trials evaluated DPP4 inhibitors, eight investigated GLP-1 agonists, and 11 looked into SGLT2 inhibitors.

33 PD CASES IDENTIFIED OVER A MEDIAN OF 2.2 YEARS IN THE TRIALS - Across these studies, 33 cases of Parkinson's were identified during follow-up that ranged from 0.8 to 5.4 years (median of 2.2 years).

Across all trials, the use of glucose-lowering drugs strongly associated with a 50% reduction in the risk of Parkinson's compared with a placebo, the meta-analysis noted. Examining each anti-diabetic medication independently, SGLT2 inhibitors were linked to a lower Parkinson's risk against placebo, but the association was weak. There was no evidence that GLP-1 agonists and DPP4 inhibitors reduced the disease's risk.

A subgroup analysis led to similar findings between trials that included type 2 diabetes patients only, as well as those enrolling adults with and without diabetes.

Researchers noted these findings "should be interpreted with caution," due to the low number of people eventually diagnosed with Parkinson's and the trials' short follow-up period. Because diagnosing Parkinson's can take three to 10 years, these cases may reflect established disease rather than the start of symptoms, they wrote.

NEWER DIABETES TREATMENTS HELP TO EASE OXIDATIVE DAMAGE AND INFLAMMATION - Type 2 diabetes and Parkinson's "share similar pathophysiological pathways, such as impaired insulin signaling, mitochondrial dysfunction, oxidative damage, and inflammation," the researchers wrote. "Newer GLDs [glucose-lowering drugs] have generated significant interest for their neuroprotective effects by improving insulin resistance and reducing oxidative damage and inflammation, which make them promising therapeutic options" for managing Parkinson's. **PEP NEWS** Parkinson Education Program of Greater Cleveland 2785 Edgehill Rd. Cleveland Heights, OH 44106

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PD Risk Seen as Elevated with Diabetes, or Poor Glucose Control

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Oxidative damage, also called oxidative stress, is a type of cell damage caused by highly reactive oxygencontaining molecules and the body's inability to neutralized them. Statistical heterogeneity was not seen in the meta-analysis, meaning the studies included were similarly conducted with the same experimental protocols. There also was no evidence of publication bias, when the outcome of the clinical trials influenced the decision to publish.

"Our meta-analysis of outcome trials suggests that there may be a potential association between newer GLDs and a reduced risk of developing [PD]," the scientists concluded. "Our findings also highlight the possibility of repurposing newer GLDs for the treatment of PD."

We need your donations to continue bringing you the *PEP* News and for other expenses. A special thanks to those who contribute at the monthly meetings. To send a donation, please make your checks payable to Parkinson Education Program and mail to 2785 Edgehill Rd., Cleveland Heights, OH 44106





TRIBUTES

Anonymous

Robert Suazo

The Peters Charitable Foundation

JANUARY MEETING No meeting—Happy New Year!

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