



Meet Dr. Sheila Baez-Torres

I was born and raised in Puerto Rico where I also went to medical school. I completed my Neurology Residency at the University of Miami and then a Movement Disorders and Electromyography Fellowship at the Cleveland Clinic in Florida. Recently I completed my studies and obtained a Master's in Business Administration from the University of Florida. I specialize in movement disorders and treat dystonia with chemodenervation.

According to the Parkinson's Foundation, approximately 60,000 Americans are diagnosed with Parkinson's Disease (PD) each year. More than 10 million people worldwide are living with PD. Although it is not exactly clear how this neurodegenerative process begins, PD symptoms develop when dopaminergic cells in the brain die as a result of the misfolded protein alpha synuclein. The deficiency of dopamine in the substantia nigra leads to the symptoms of PD.

There are four typical symptoms associated with PD: tremor at rest, rigidity, imbalance (postural instability) and bradykinesia. Nevertheless, not all patients present with every symptom. While the classic description of PD includes motor (movement) related symptoms, there are many nonmotor symptoms as well: decreased sense of smell, constipation, gastroparesis, mood disorders, sleep disorders, slowing of thought, and in some cases dementia. Urinary and sexual function can also be affected.

In this newsletter, I would like to define ON time and OFF time periods. ON time is when the PD medications are working, and the PD symptoms are controlled. OFF time is when the PD medications are not working, and symptoms re-emerge. Both ON time and OFF time terms are useful when evaluating how patients respond to levodopa therapy (the mainstream treatment of PD) and for how long the symptoms are controlled (duration of their ON time) before the medication(s) wear off. Based on this, their medication(s) can be adjusted for sustained symptom control.

Most of the available treatment options try to either mimic dopamine or inhibit the metabolism of both endogenous and exogenous dopamine. As of today, none of them cure, reverse, or slow down the progression of the disease. Research studies that may help modify this progressive neurodegenerative process is an opportunity for some patients.



A Message from Dr. Goodman

2019 appears to be a promising year concerning treatment for the growing number of those with Neurodegenerative Diseases. Research is linking disorders such as Alzheimer's Disease to infectious processes, in fact, there is a pending large phase II clinical trial attacking a specific pathogen. Likewise, there is increasing research looking at the gut-brain connection in Parkinson's Disease. Epidemiologically it has been recognized that people undergoing appendectomy have a decreased risk of developing Parkinson's Disease. The misfolded protein in Parkinson's Disease (alpha-synuclein) has been identified in the neurons in the appendix. Similarly, the abnormal microbiome has been associated with Alzheimer's Disease. Antisense oligonucleotides which prevent transcription for abnormal proteins has already been FDA approved for spinal muscular dystrophy and is now being looked at to treat ALS and Parkinson's Disease.

New FDA Approvals for Parkinson's Disease

- FDA approved inhaled levodopa (Inbrija) for Parkinson's Disease in December 2018. Indicated for on demand use during "off" episodes in those with Parkinson's Disease taking an oral carbidopa-levodopa regimen. Onset of action was as early as 10 minutes Bioclinica Research was the #1 site worldwide for this trial.
- In December 2018, Insitec announced their Exablate Neuro device earned FDA approval to treat Tremor Dominant Parkinson's Disease. The treatment was approved in 2016 for Essential Tremor.



COMMUNITY CORNER

KOPD-Knock Out Parkinson's Disease

Classes in Winter Park (407-790-4001), Oviedo (407-542-0977), Downtown (407-802-2339), and Hunters Creek (407-757-0234). www.titleboxingclub.com

Michael J Fox Foundation, www.michaeljfox.org

Parkinson's Association of Central Florida, www.PARKINSONCF.org

Parkinson's Disease Foundation, www.Parkinson.org

Lewy Body Support Group

2nd Monday of the Month at 4:30pm
Bioclinica Conference Room, 5th Floor
100 W Gore St, 5th Floor, Orlando, FL 32806



Alzheimer's & Dementia Resource Center
adrccares.org, 407-436-7750

- Offers classes, support groups, and online tips for caregivers, along with a calendar of events.
- Affiliated with Brain Bank – see website for more information.

Alzheimer's Disease and Related Dementias (ADEAR)
National Institute on Aging

www.nia.nih.gov/health/alzheimers

- Extensive Resources for Healthcare Professionals



BIOCLINICA
RESEARCH

Orlando · Melbourne · The Villages · Ocala
bioclinicaresearch.com

Current Trial Count

Alzheimer's Disease-

Disease modifying, symptomatic and agitation trials: 9

Preventive (no memory complaints) trials: 2

Parkinson's Disease-

Disease modifying and symptomatic trials: 6

ENLIGHTEN trial revealed that exercise and DASH diet education improved executive function testing in individuals with memory loss (cognitive impairment, no dementia). A 6-month study of 160 inactive men and women with average age 65 were randomized into 4 groups. One intervention group exercised for 35 minutes, 3 times per week at 70-85% of their initial peak heart rate reserve for 3 months. One group received education about the DASH diet and received frequent feedback about adherence from a nutritionist. There was a combined exercise and DASH diet group and a no exercise, no diet, control group. The combined exercise and DASH diet group improved their executive function scores by 9 years (84 year old, which was an improvement from 93 years of age pre study). DASH diet alone did not improve cognitive function but was found to improve cardiovascular health.

Alzheimer's Association is supporting the U.S. Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk (U.S. POINTER). It is a two-year trial to evaluate whether lifestyle interventions that simultaneously target many risk factors, protect cognitive function in older adults who are at increased risk for cognitive decline. It is the first such study to be conducted in a large group of Americans across the United States. Interventions will include Physical Exercise, Nutritional Counseling & Modification, Cognitive & Social Stimulation, and Improved Self-Management of Health Status. Look for results in the coming years.