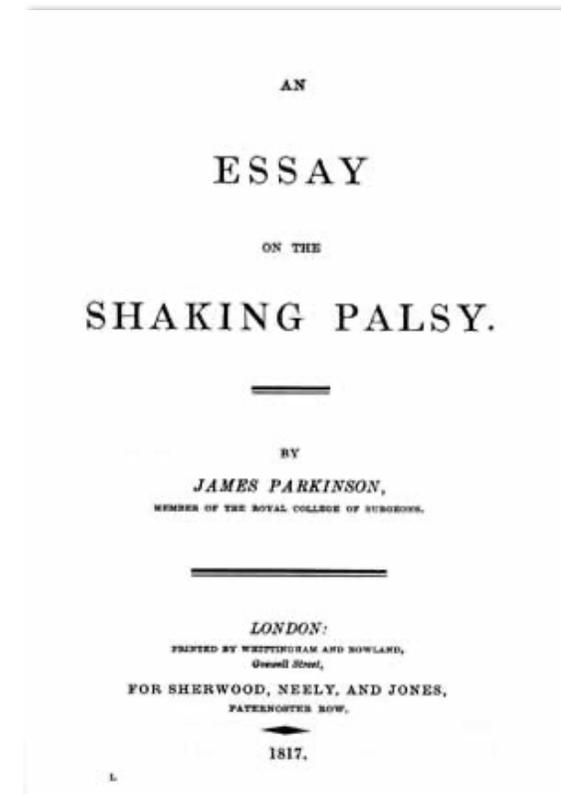


PARKINSON'S & SPEAK OUT!®

DR. JAMES PARKINSON (1755 -1824)

- 1817
- English physician
- First to medically describe the condition
- *An Essay On The Shaking Palsy*



APRIL IS “PARKINSON’S AWARENESS MONTH”

World Parkinson’s Day
April 11th
James Parkinson’s Birthday



Dr. James Parkinson Tulip

DR. JEAN-MARTIN CHARCOT (1825-1893)

- French neurologist
- Refined Parkinson's earlier description
- Differentiated Parkinson's from MS and other disorders



DR. JEAN-MARTIN CHARCOT (1825-1893)

- Suggested name change: Parkinson Disease
- Not all patients have a tremor
- Parkinson's patients are not markedly weak

Muscles become weak because they're not used to their full capacity, not because Parkinson's is making them weak.

FOUR CARDINAL SYMPTOMS

Resting Tremor

Slowness of Movement

Impaired Balance

Rigidity (stiffness)

Let's take a poll!

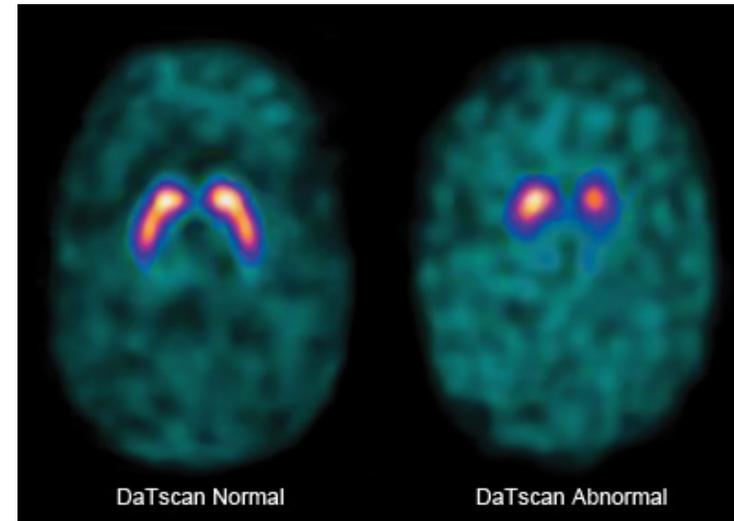
What was the first symptom you noticed?

HOW PARKINSON'S IS DIAGNOSED

- Thorough case history
- Neurological exam
- CT, MRI, blood tests help rule out other disorders that may mimic Parkinson's
- Patient presents with **2 of 4** cardinal symptoms
- Positive response to PD medications
- DaTscan

WHAT IS A DaTscan?

- An imaging technology that **reveals the levels of dopamine** in the brain
- DaTscans confirm a clinical suspicion of Parkinsonism



[Untitled photograph of a DaTscan]. Retrieved November 13, 2014, from: <http://www.essentialtremor.org/treatments/datscan/>

WHAT CAUSES PARKINSON'S?

- Neurons that produce a chemical called **dopamine** die or become impaired
- 80% of dopamine-producing cells are lost by the time motor symptoms appear

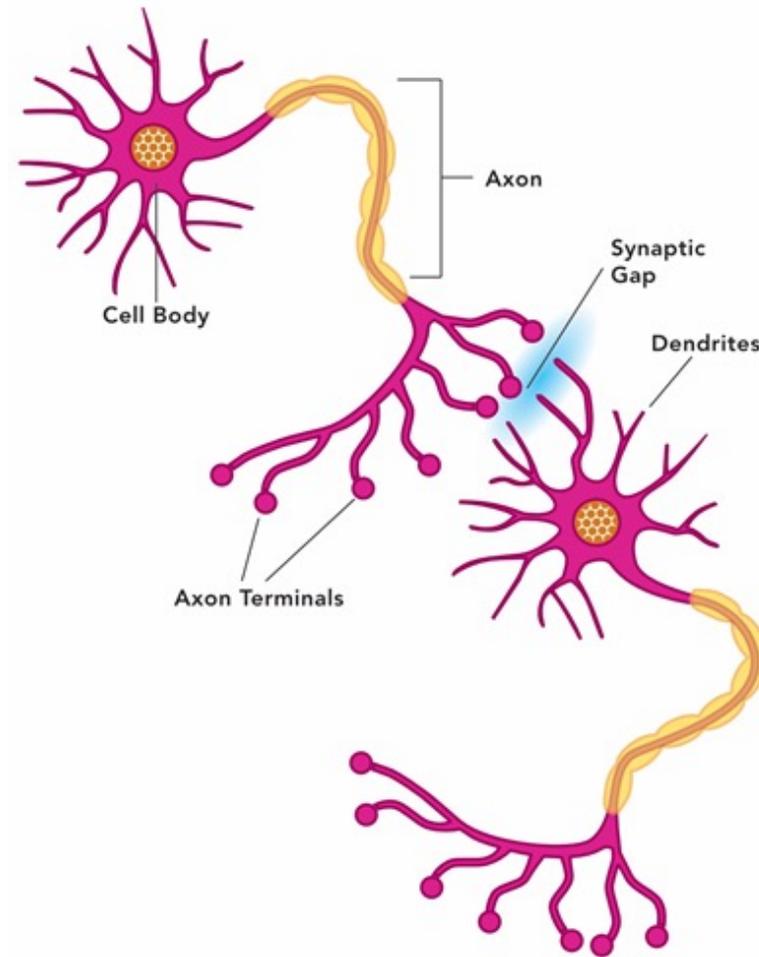


ROLE OF DOPAMINE

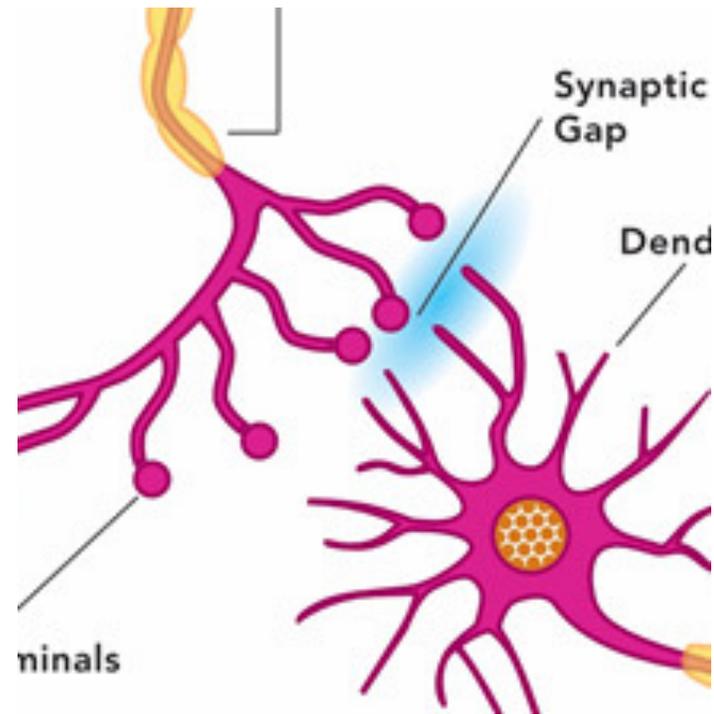
Dopamine is a neurotransmitter that *transmits* impulses from one neuron to the next for the planning and controlling of **automatic** muscle movements.

**Without enough dopamine,
automatic movements are disrupted.**

TWO NEURONS COMMUNICATING



Dopamine is released into the gap and acts like a “bridge” to help transmit information from one neuron to the next.



With less dopamine,
automatic movements are disrupted.

What are some automatic movements?

Production of **speech** is
a highly automatic behavior.





90% of individuals with PD are likely to
develop speech disorders.

Ho, et al., 1998
Perez-Lloret, et al., 2012

EARLY SIGNS OF A SPEECH DISORDER

- Reduced vocal volume
- Hoarse-sounding vocal quality
- Frequent throat clearing
- Trailing off at the end of sentences
- Inconsistent production of the voice

Let's take a poll!

Have you noticed a change in your speech or voice?

Aspiration pneumonia is reported as the most common cause of death in PD and is estimated to account for as much as 70% of mortality rate.

Mehanna, et al. 2010



EARLY SIGNS OF A SWALLOWING DISORDER

- Drooling
- Coughing during or soon after eating or drinking
- Wet/gurgly vocal quality when eating or drinking
- Sensation of food or pills “getting stuck”
- Unexplained weight loss

Let's take a poll!

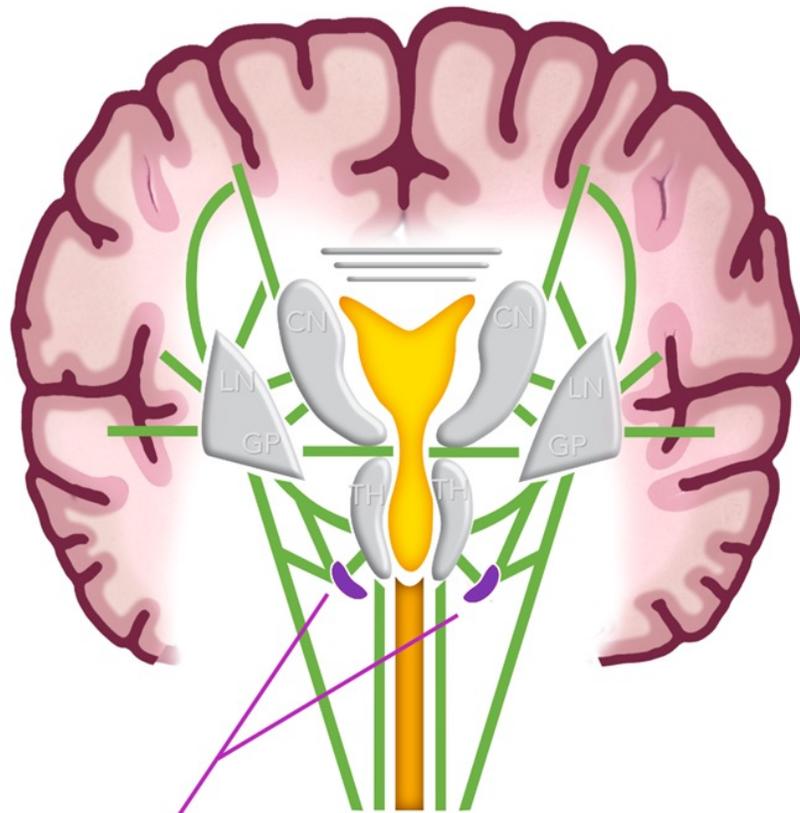
Have you noticed a change in swallowing?

Ready for some
good news?



Extrapyramidal System

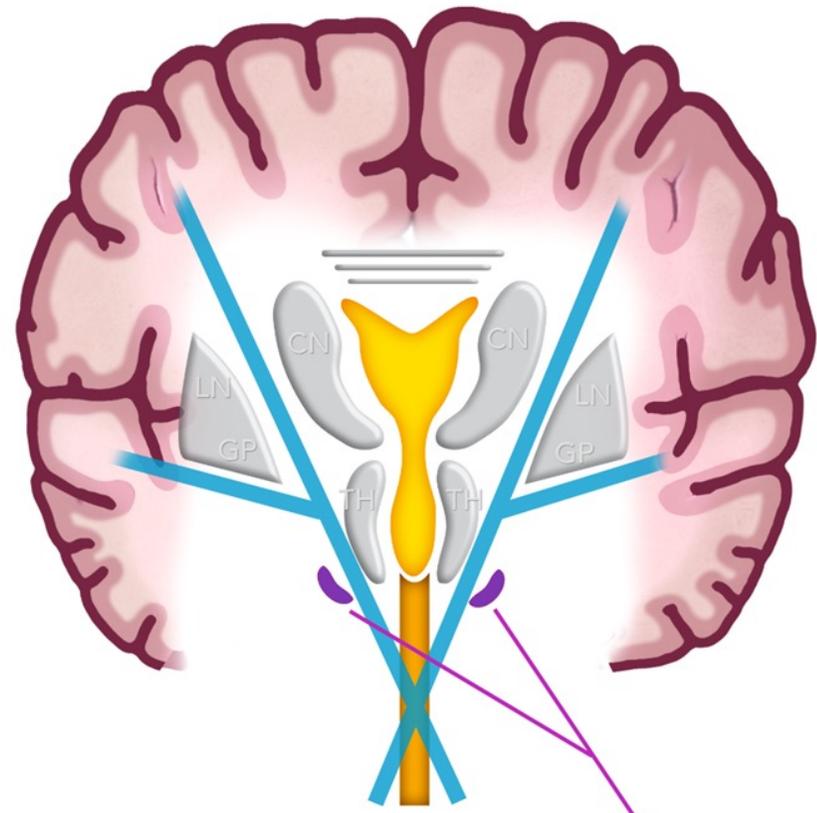
Automatic System



Substantia Nigra

Pyramidal System

Intentional System



Substantia Nigra

**AUTOMATIC SPEECH
VS
INTENTIONAL SPEECH**

VIDEO

Speaking with INTENT



Parkinson Voice Project's program teaches individuals with

Parkinson's how to **convert speech from an automatic function to an intentional act.**

Speech Evaluation

Parkinson's Webinar

SPEAK OUT!®

Six-Week Follow-Up

The LOUD Crowd®

**Daily Home
Practice**

**Speech &
Singing Groups**

**SPEAK OUT!
Refreshers**

LEARN ABOUT PARKINSON'S

Monthly Webinar

*Understanding Parkinson's
& Speaking With INTENT!*

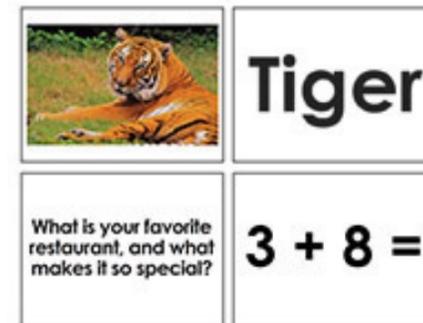
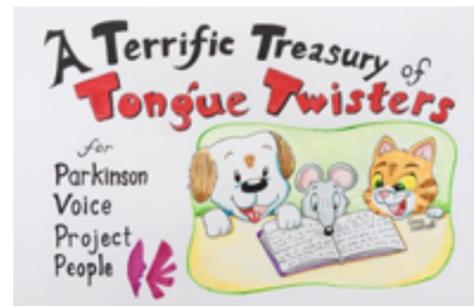
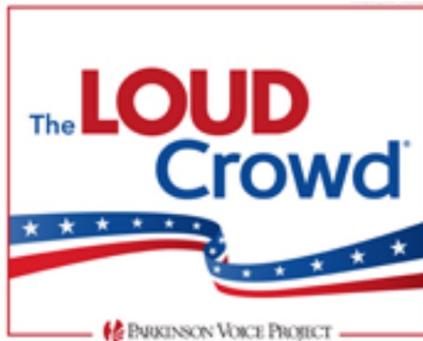
Presented by
Samantha Elandary, MA, CCC-SLP
Founder & CEO
Parkinson Voice Project

 PARKINSON VOICE PROJECT

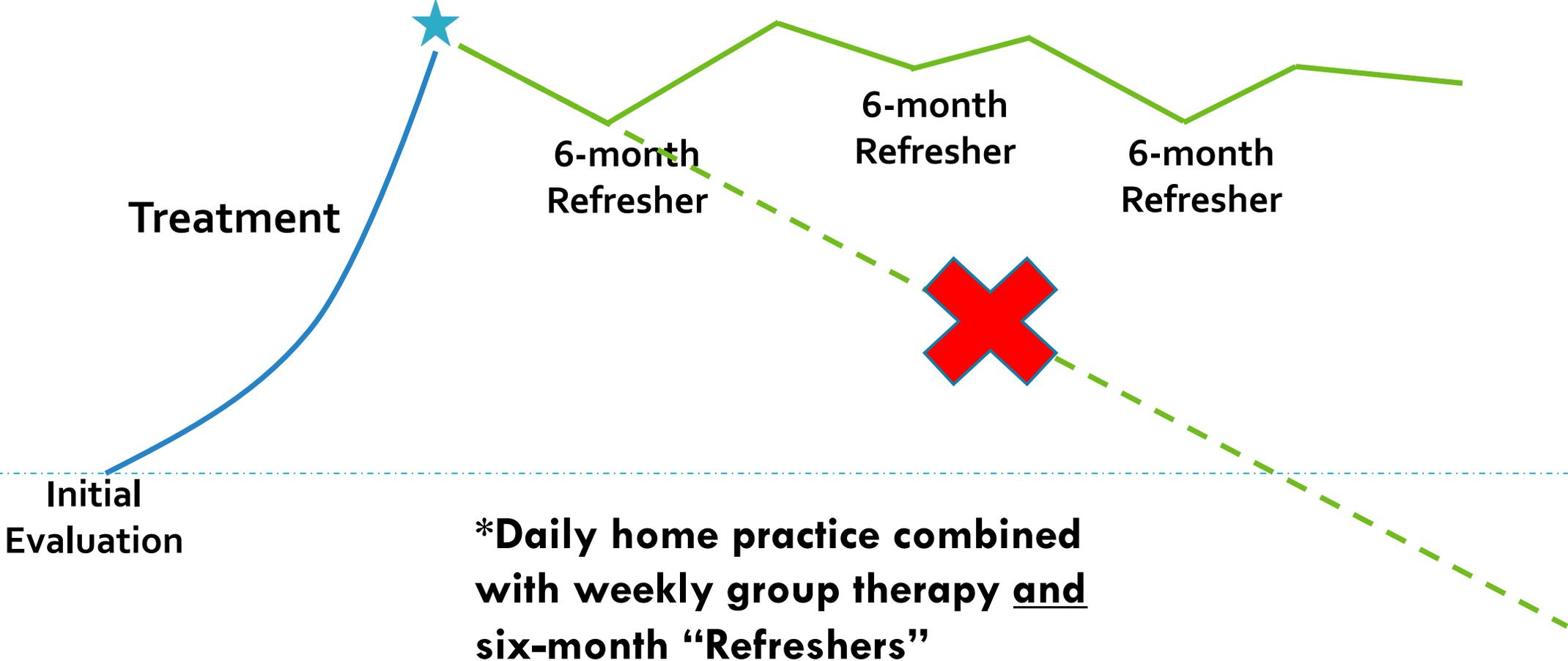


Every SPEAK OUT! patient receives
free access to
Parkinson Voice Project's eLibrary!

Therapy Materials in our eLibrary!



IDEAL TREATMENT MODEL FOR ALL THERAPIES



Let's take a poll!

Have you completed the SPEAK OUT! Therapy program?

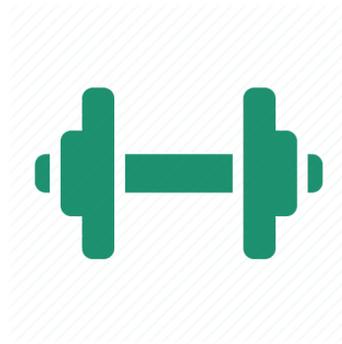
TWO MAJOR CHALLENGES

There is a “sensory deficit” associated with Parkinson’s. Movements don’t “feel” the way they’re really working.

Dopamine also contributes to
our motivation and drive.

**Without enough dopamine,
motivation is a challenge for those with Parkinson's.**

People with PD need to actively find ways to motivate themselves to exercise daily.



Set a routine

Online Parkinson's Speech Exercises (M-F at 10am CT)

Join a gym or hire a trainer

Exercise with a friend or a group

Attend LOUD Crowd

Online SPEAK OUT! Home Practice Sessions

Parkinson's Speech Exercises

SPEAK OUT! Home Practice



Samantha Elandary
MA, CCC-SLP



Michelle Eppley
BMus, MA, CCC-SLP

Join us Online Monday - Friday

Click Here to Practice!

Let's take a poll!

**Are you participating in
Parkinson Voice Project's online
SPEAK OUT! Home Practice Sessions?**



PARKINSON VOICE PROJECT®

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ParkinsonVoiceProject.org