

---

---

# An Individual's health, not a patient's disease

— **Evan L. Gray, D.O.** —  
Movement Disorder Specialist

---

---



INTEGRATED  
NEUROLOGY SERVICES PLLC

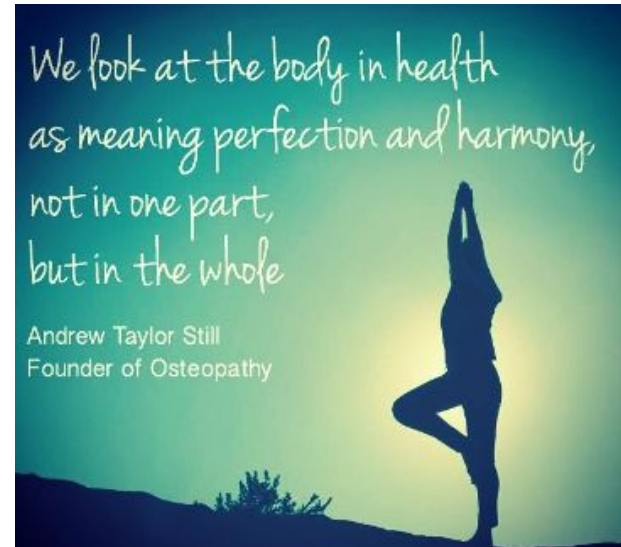
January 18, 2024

# How did I end up here?

Medicine connects the teacher (**doctor**) with the one who suffers (**patient**)

Scientific knowledge is a **foundation**. Knowing treatment and diagnosis is **key**.

Communication and building trust is **essential**



# The Joy of helping those with Parkinson's Disease

There is SO much we can do

Restoration of function

Improvement in walking, talking, mood, concentration, motivation, energy, balance, sleep, eating, independence

**Completely Individualized**

Every visit gives me an opportunity to improve your life

# What is Parkinson's Disease?

Progressive condition

**Progressive does NOT mean fast**

*Diagnosis does NOT take into account non motor symptoms*



# What does it mean? Rigidity

“I can’t stand up from a chair without help”

“I nearly fall when I turn around “

“I have shoulder pain on the right side. I was told I may need surgery. “

“I have a lot of cramping”

“I can’t roll over in bed”

# What does it mean? Bradykinesia

“My father has a lot of shuffling and takes small steps “

“I always carry my handkerchief with me because I drool”

“I don’t use button-ups anymore”

“I can’t keep up with my family when we go out”

# Dopamine Replacement

Significantly can help rigidity and bradykinesia

**Adapting to a new pace may require more than medications:**

PT, OT, Speech therapy, exercise

Side effects need to be discussed with doctor

# What “stage” are you in?

## PD doesn't abide by strict timelines

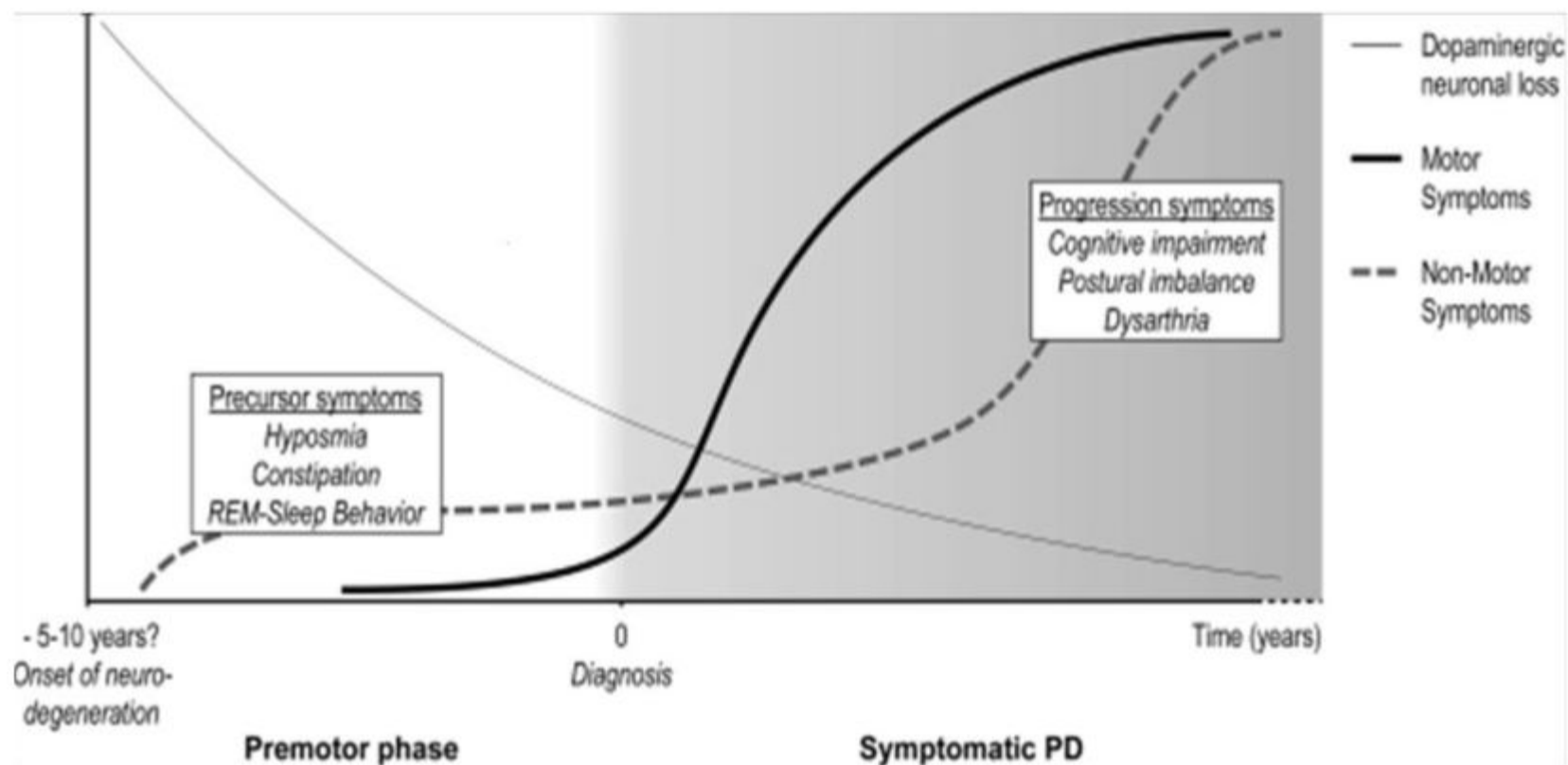
Early stage may suggest it doesn't affect you

Later stage may suggest you are out of options

There is always something we can do to help







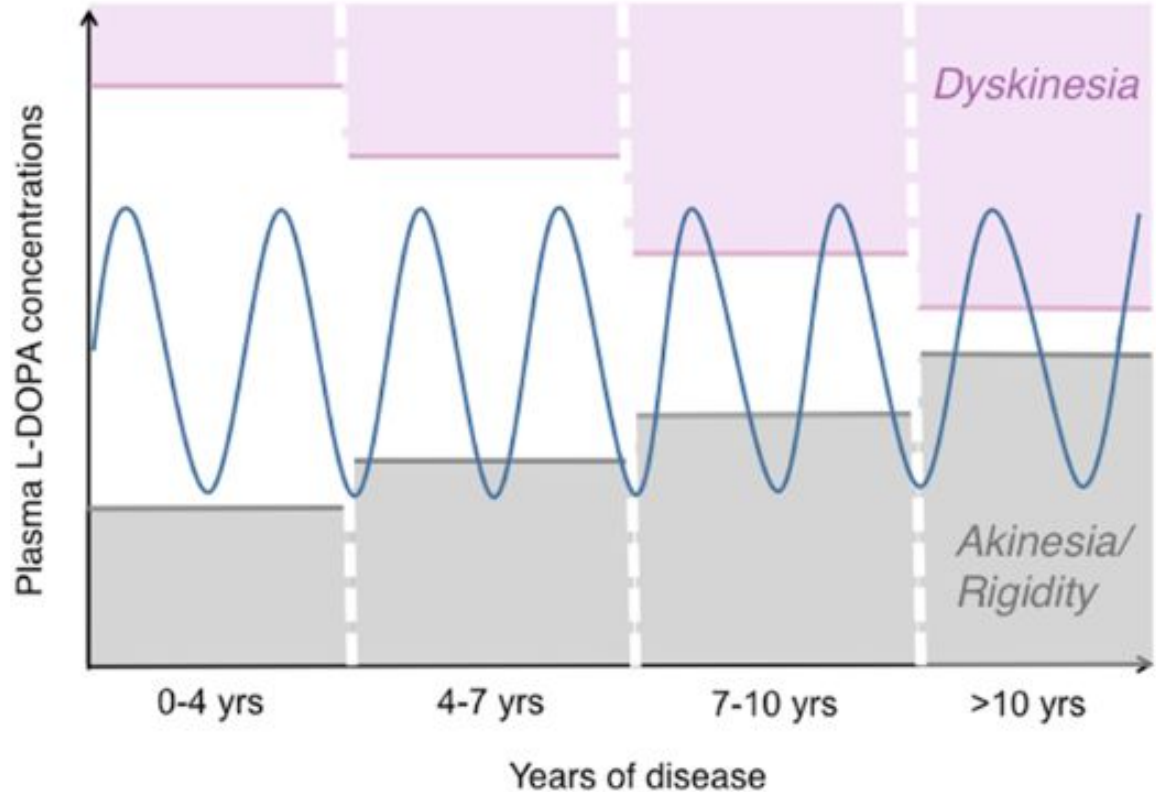
# ON vs OFF

Pink =Dyskinesias

Gray= OFF,  
Freezing, stiffness,  
slow

White= ON (ideal  
state)

**Pink and Gray is  
unique for each  
individual**



# More ON, Less OFF

Our goal should be to limit motor fluctuations

Treatment with Dopamine replacement is vital

My Goal= Target motor fluctuations to get more ON and less OFF. Be a mastery of medication options

Your goal= Know your OFF and tell your specialist when you aren't ON

# Non-motor OFF

Just like motor symptoms, it improves with medications

Feeling anxious, depression, irritable, fatigued

Urge to urinate

Sweating

Body pain

Brain fog

Dizzy

# What doctors are taught

1. Look for disease
2. Connect symptoms to a syndrome or condition
3. Focused on getting to the diagnosis:

Lab tests, X-rays, Ultrasounds, MRI, CT scans...

4. Prescribing medication or therapies

# Patient perspective

1. My symptoms are caused by my parkinson's disease
2. I need medications for them
3. I need to keep seeing the doctor and keep taking medications
4. I am told I will get better with physical therapy.
5. I am told to "Exercise" and "Eat healthy".
6. How do I know if I am really doing good?
7. On my 15 minutes follow up visit, the doctor says I am looking good.

# 44 year old with tremors

He is very active and doesn't take any medications.

His right arm is not moving when he walks

*Western Medicine's response:*

You have parkinson's, here is carbidopa-levodopa. Come back in 3 months



# Treat the individual

Before discussion of treatment....

Tell me more about yourself. What do you do for fun/work?

How does your tremor affect you activities?

What do your family or friends notice?

What worries you the most?



# Counseling

Treatment may or may not be needed at this time.

Education about condition, potential treatment, therapy and **things you can do for yourself without the need for a doctor.**

My goal: By the end of the visit, all questions will have been addressed and the patient will have understood

# 88 year old with difficulty walking

She was diagnosed 5 years ago. She is now wheelchair bound and needs assistance standing up. She is incontinent to urine. She sees small insects crawling around at night.

*Western medicine's response:*

Order blood work, MRI brain.

Give a medication to reduce urinary incontinence, a sleep aid and a medication to help with hallucinations and medication for parkinson's



# My approach

Before discussing treatment...

When was the last time you were walking independently?

How active were you before your symptoms?

Are you in any physical pain?

Who takes care of you?

What are some expectations you have?

What is the most bothersome symptoms?

# Medicine is about finding solutions that work

Medications may not be the most important factors.

How can you improve her quality of life?

What is most important to her?

We can avoid overmedicating and causing unnecessary frequent trips to the doctor

# Vitals for life

Physical activity

Sleep

Nutrition



# Exercise can slow progression!

Increases natural dopamine levels in the brain

Neuroplasticity to help restore affected pathways



# BIG therapy

- Improvement in hesitation, slowness and smallness of movement
- Improved motor AND non motor symptoms



# Sleep!

- Insomnia
- Early waking
- Difficulty falling back asleep
- Frequent urination
- Stiffness
- Violent dreams
- Anxiety, depression





# Excessive Daytime Sleepiness Causes

- Poor quality of sleep
- Insomnia
- Mood changes
- Poor motivation
- Environment
- Physical inactivity/lack of stimuli
- Medications

## Epworth Sleepiness Scale (ESS)

Situation	Chance of dozing (0-3)			
Sitting and reading	0	1	2	3
Watching television	0	1	2	3
Sitting inactive in a public place—for example, a theater or meeting	0	1	2	3
As a passenger in a car for an hour without a break	0	1	2	3
Lying down to rest in the afternoon	0	1	2	3
Sitting and talking to someone	0	1	2	3
Sitting quietly after lunch (when you've had no alcohol)	0	1	2	3
In a car, while stopped in traffic	0	1	2	3
<b>Total Score</b>				

0 = would never doze 1 = slight chance of dozing 2 = moderate chance of dozing 3 = high chance of dozing

Johns MW. *Sleep*. 1991;14:540.

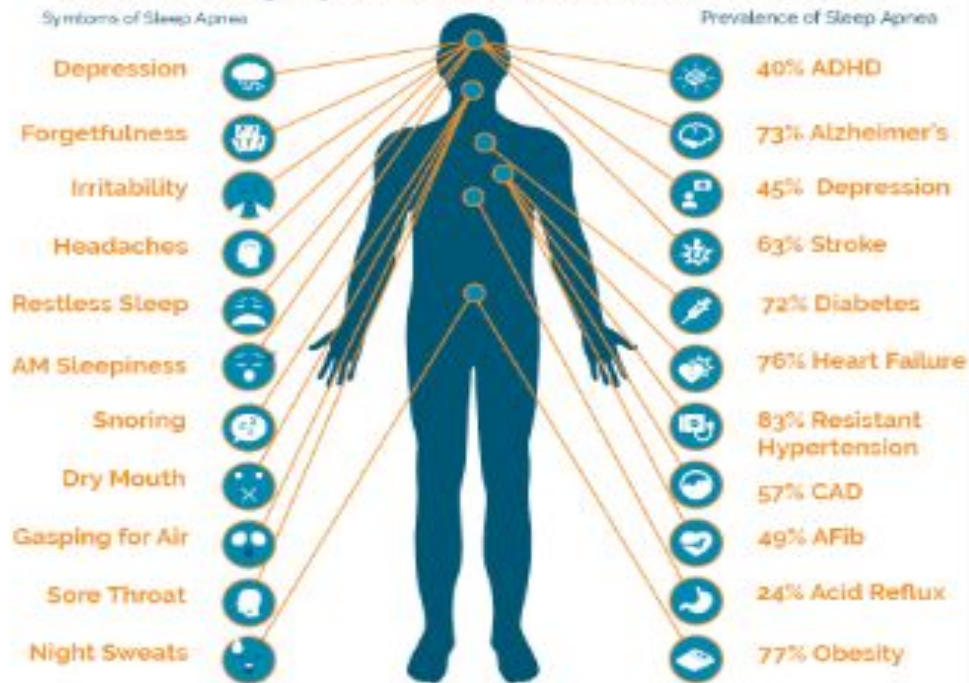
# Check for sleep apnea!

Upper airway obstruction (rigidity and reduced movement) 24-65% of PD

PD and Sleep apnea association!

**Ask your doctor about a sleep study!**

## Obstructive Sleep Apnea (OSA) Common Symptoms & Associated Conditions



# Risk factors for Sleep Apnea

Sinus or nasal septum defects

Large tongue, posterior jaw

Alcohol, tobacco, sedatives

Supine sleeping

Obesity

Thick neck

Fig. 1

## Screening tool for OSA: STOP-Bang

<b>S</b>	Does the patient <b>snore</b> loudly (louder than talking or loud enough to be heard through closed doors)?	Y/N
<b>T</b>	Does the patient often feel <b>tired</b> , fatigued, or sleepy during the day?	Y/N
<b>O</b>	Has anyone <b>observed</b> the patient stop breathing during their sleep?	Y/N
<b>P</b>	Does the patient have, or is the patient being treated for, high blood <b>pressure</b> ?	Y/N
<b>B</b>	Does the patient have a <b>BMI</b> of more than 35?	Y/N
<b>a</b>	<b>Age.</b> Is the patient older than 50?	Y/N
<b>n</b>	Is the patient's <b>neck</b> circumference greater than 40cm?	Y/N
<b>g</b>	<b>Gender.</b> Is the patient male?	Y/N

Scoring: **Y ≥ 3 = high risk of OSA**  
**Y < 3 = low risk of OSA**

# Treatment for OSA

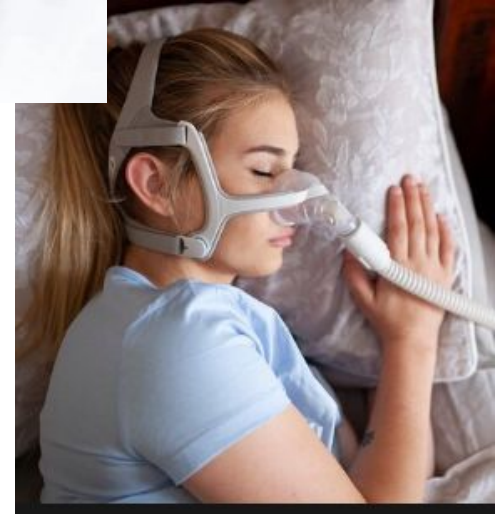
Weight loss

CPAP\*

Oral Mandibular Device

Inspire

Surgery (Gastric bypass or oral)



# Insomnia

Meds have limited evidence but can have side effects

But what is it that keeps you up?



# Sleep Hygiene (CBT-I)

- Caffeine in the afternoon
- Cut out alcohol at night
- Too loud, too bright
- Laying awake? Get out after 20 minutes!
- Natural light in the AM



# Restless Leg Syndrome (and Periodic Limb Movements)

Inner Urge to move that reliefs with movements

Starts late at night but can occur earlier on

Up to 50% can develop RLS

75% develop it after PD diagnosis



# REM Behavioral Sleep Disorder

~50% of PD (prodromal symptom)

Bed Rails, remove fragile objects,  
bed partner awareness





# Nutrition: You are what you eat!

FDA only recommends 28g dietary fiber per day!

Fiber is from plants

Vitamins, minerals, water, antioxidants...

May help medication work better!



# Fiber's impact

FDA recommended amount x 3 months in a study

- Improved quality of life
- Increase dopamine levels
- Reduced constipation

Imagine if you ate even more fiber!

Less glucose spikes, lower inflammation, weight loss...

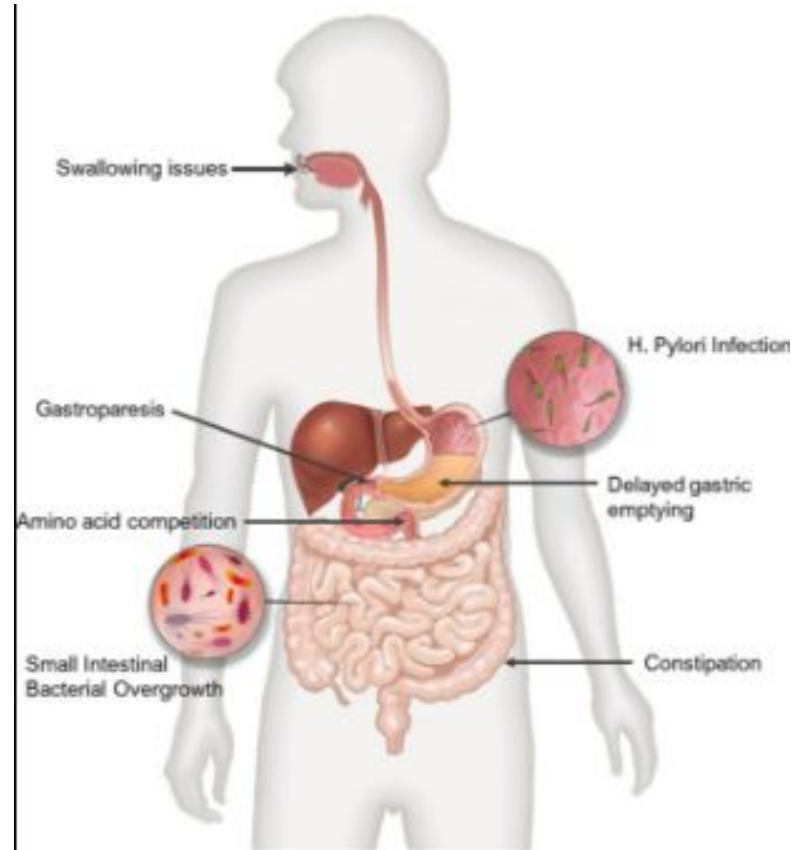


# Roadblocks to Entry

Levodopa IS a protein

Protein in our diet can block its absorption into our blood and our brain!

Likely not impactful at beginning



# Protein Redistribution Diet (PRD)

Multiple studies show **60-100% improvement in motor fluctuations**

*Limit protein intake at breakfast and lunch (under 7 grams)*

*Eat most at dinner time*

- More ON time during waking hours
- OFF time can be afforded more when asleep
- Consult with your physician and a dieticians
- Caution if you are underweight
- May need a dose adjustment

NATIONAL BESTSELLER

"A radical breakthrough... There is no question in my mind that it will work for you."

—MICHAEL OZ, M.D.

# EAT TO LIVE

THE AMAZING NUTRIENT-RICH PROGRAM  
FOR FAST AND SUSTAINED WEIGHT LOSS

JOEL FUHRMAN, M.D.

COMPLETELY REVISED AND UPDATED

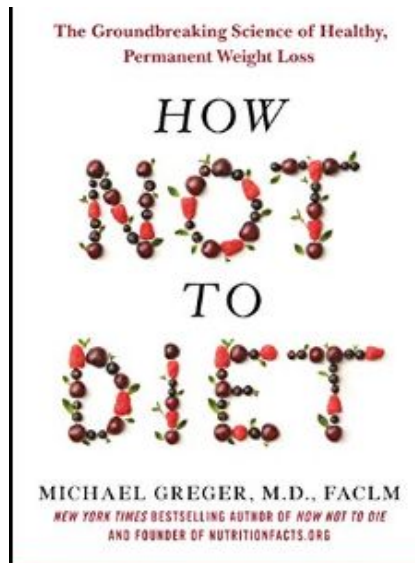
LOSE 20 LBS.  
OR MORE  
IN 6 WEEKS



# Dr. Michael Greger

## “Food as Medicine” TED Talk

Many videos on Parkinson’s Disease



# “I feel like I’m going to pass out”

## Orthostatic Hypotension

### Conservative measures

- Hydration, stand up slowly, compression stockings, abdominal binder, avoid large meals

### Adjustment of Medications

- PD med changes, revise BP meds
- Midodrine, Fludrocortisone, Droxidopa



# “My mom wears Depends now”

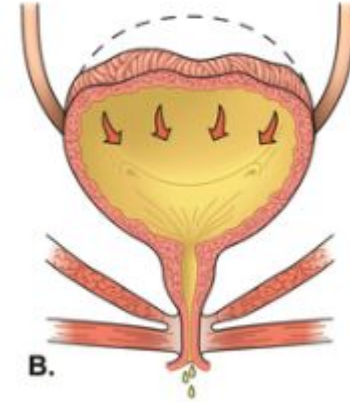
## Urinary urgency

Be mindful of fluid intake, limit caffeine, alcohol

Scheduled bathroom breaks

Check prostate, talk with urologist

Urgency Incontinence



B. Bladder muscle contracts before the patient is ready to void.



# “He always has to clean his shirt off”

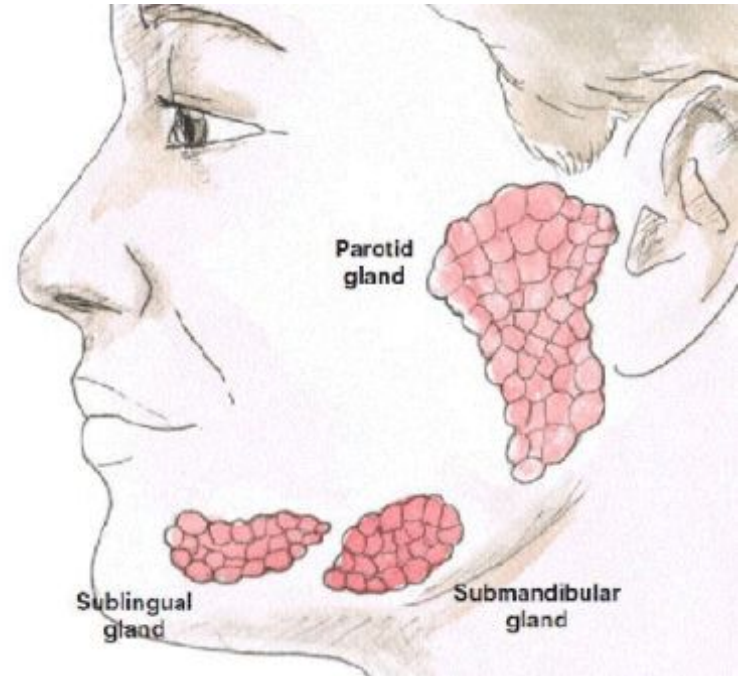
## Excessive drooling

Chew gum or a candy

Atropine (eye) drops

Glycopyrrolate patches (lower risk to affect cognition)

Salivary gland injections



“It’s been over a week...”

## Constipation

Hydration, fiber

“*Rancho recipe*” 1 cup bran/raw oatmeal, 1 cup of applesauce,  $\frac{3}{4}$  cup of prune juice

- 2 tablespoons every morning

Stools softeners, laxatives

If needed, suppository or enema

More exercise= more regularity!



# “He says I took his money”

## Delusions and hallucinations

More advanced stages (75% have visual hallucinations at some point)

Concerning if insight is lost

Redirection, try not to argue, keep patient safe, calm down



# “He is not himself anymore”

## Depression, apathy, dementia

36% have depression, 50% develop dementia (at 10 y

Eat healthy, sleep well and get moving!

Family, community support

Crossword puzzles are not enough...learn to play an instrument, a language, painting, volunteering



# “I’m the main person that’s there for him”

## Caregivers

Seek help from family, friends,  
neighbors

Assisted/independent living

Get time to shower and sleep

See a therapist

In home PT, OT, speech, nursing

Short term or long term disability



# When Non motor overtakes motor symptoms

Advanced Directives (when patient has cognitive capacity)

Durable power of attorney (acts in the best interest of the patient)

Palliative care specialist

Work with the movement disorder specialist

Dopamine replacement therapy may need to be reduced

# Thank you!



West Alexandria, Old Town Alexandria

Falls Church, Lorton

**703-313-9111**

