#### Your Head in the Clouds

Brain Fog with Parkinson's Disease

Parkinson's Society of BC September 14, 2020 Cheryl Daniels

### Agenda

- \* What is Brain Fog? How do we define it?
- \* A symptom with many contributing factors
- \* How we try to determine what is causing the brain fog
- \* Discuss compensatory and adaptive strategies
- General wellness and overall brain health

# "Brain Fog"

- \* "fuzzy thinking"
- \* "unable to feel sharp in their thoughts"
- \* the inability to have a sharp memory or to lack a sharp focus. You just really feel like you're not yourself and you're unable to think clearly.



- \* A description of a symptom
- \* caused by various lifestyle choices and behaviours, medications, other medical conditions
- \* Poor diet, <u>sleep</u> disorders, infections, altered mood, inactivity, chronic stress
- \* Diabetes, thyroid condition, low iron, heart disease, excess weight

# "Fatigue"

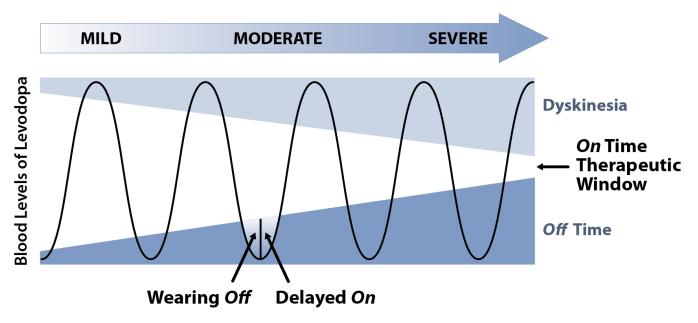
- \* 1/2 PD patients report fatigue with 1/3 indicating it is most debilitating symptom
- \* Exhaustion, lack of energy. Not improved by rest
- \* Physical-deeply tired/weary. Unable to do things. No energy
- \* Mental-difficult to think, focus or concentrate
- Overlaps many other symptoms

## Causes of Fatigue

- \* Medications
- \* Sleep issues
- \* Mood alterations-Depression/Anxiety/Apathy
- Cognitive deficits
- \* Deconditioning
- \* Other health conditions

#### Effects of Medications

\* Levodopa-ON/OFF phenomena



Adapted from: J. Jankovic. Motor fluctuations and dyskinesias in Parkinson's disease: clinical manifestations. Mov Disord.2005;20(11):S11-S16.

# Advanced therapies

\* DBS



\* Duodopa



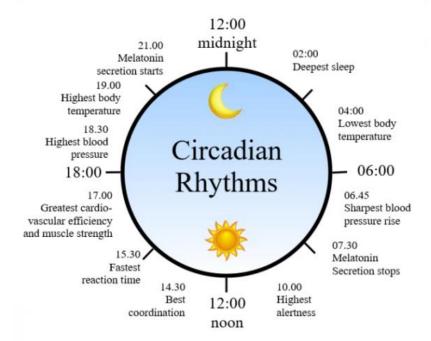
#### Medications cont'd

- \* Dopamine agonists sleep attacks, compulsive behaviors, antidepressant properties
- \* Amantadine-stimulant
- \* Antidepressants/anxiolytics
- \* Sedatives, pain medication, beta blockers
- \* What else are you taking?? Medication review

#### Sleep issues

- \* Very common
- Can occur any time-often precedes diagnosis by many years
- \* REM sleep behavior disorder
- \* Difficulty falling asleep
- \* Difficulty staying asleep insomnia
- Sleeping too much often in more advanced situations
- \* Cognitive symptoms- sun downing, agitated, wandering, hallucinating

\* Changes in parts of the brain that regulate sleep. Primary sleep-wake cycle is dysregulated leading to fragmented sleep patterns



\* Result is daytime sleepiness and fatigue, reduced mental clarity

#### \* Other disrupters:

- -difficulty turning in bed
- -return of PD symptoms- tremor, rigidity, restlessness, dystonia, thermoregulatory symptoms, dysregulated mood
- need to go to the bathroom frequently
- -sleep apnea
- -stress

## Improve Sleep

- \* Medications- melatonin, clonazepam, antidepressants
- \* Maximize management of PD symptoms by adjusting medications
- \* Good sleep hygiene
- \* Satin sheets, pyjamas, bed rails
- \* Exercise, sunlight, avoid late naps, stimulation
- Psychological stress



#### **Mood Changes**

- Depression, anxiety and apathy
- \* No joy in life, feel tired, constant worry, panic attacks, loss of interest in things you used to enjoy, difficulty focussing and concentrating on things
- \* Affects 30-60% of patients
- \* Any time during the course of the disease as well as before motor symptoms appear
- \* Due to adjusting to the diagnosis but also overall changes in brain functioning
- \* A feature of wearing off

#### **Mood Boosters**

- Medication-PD and mood stabalizers
- Counselling, Psychiatry
- Meditation, biofeedback, yoga, Cognitive Behavioural therapy
- \* Social activities, support, volunteer
- Exercise, sunlight and fresh air, healthy eating
- One of the more common causes of cognitive complaints relate to altered mood

## Cognitive changes

- \* Changes the ability to maintain attention, think clearly, remember things, slowing of thought
- Increases with age and disease duration-Mid-later stages of the disease
- Memory/thinking problems (dementia) OR hallucinations/delusions
- \* Fluctuates with medication ON/OFF cycle
- Exacerbated by some PD treatments and even levodopa
- Can be other underlying pathology contributing to cognitive dysfunction head injuries, stroke or vascular damage

- \* 40% of people over 65 experience some memory loss
- \* Considerable variation in the specific cognitive functions over time and per the individual
- Consider other contributing factors to cognitive changes
- \* In general, cognitive changes that are concerning interfere with day to day function, independence, are a concern of others around you and less apparent to the individual themselves
- \* How are you functioning in relation to your peer group??
- \* Is safety a concern??

# Managing cognitive problems

- \* Manage PD symptoms-sleep and mood issues
- Treatment specific medications-rivastigmine, donepezil
- \* PD medication adjustments
- Cognitive exercise
- Timing of activities/events
- Practical strategies

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Caregiver support

#### Decreased activity levels

- \* Increased difficulties/challenges walking, moving
- Reduced activity levels-with or without apathy
- Caregiver stress, relationship stress
- \* Deconditioning
- Reduced brain perfusion, decreased stimulation
- \* Increased fatigue and slowed cognitive function
- Exercise, participate, encourage visitors, elicit help

#### Other Health Conditions

- \* Commonly diagnosed after age 60, increases in incidence with age
- Vascular disease, diabetes, thyroid problems, low iron
- \* Medication side effects
- \* Orthostatic hypotension, chronic pain
- \* Sleep apnea



- \* Manage other underlying medical conditions
- \* Healthy blood pressure, blood sugar
- \* Medication review-substitute, alter timing, simplify
- \* Exercise
- \* Healthy eating
- Drink water

#### **Brain Wellness**

- \* Control Blood pressure
- \* Be smoke free
- \* Alcohol in moderation
- Healthy eating
- \* Adequate rest
- \* Organization
- \* Plan ahead
- \* Be kind to yourself and others



### Summary

- Brain fog is a common symptom in PD
- \* There are many other things that can contribute to brain fog
- Many medical and practical solutions
- \* Fluctuates with med cycle
- \* Exercise is important

