

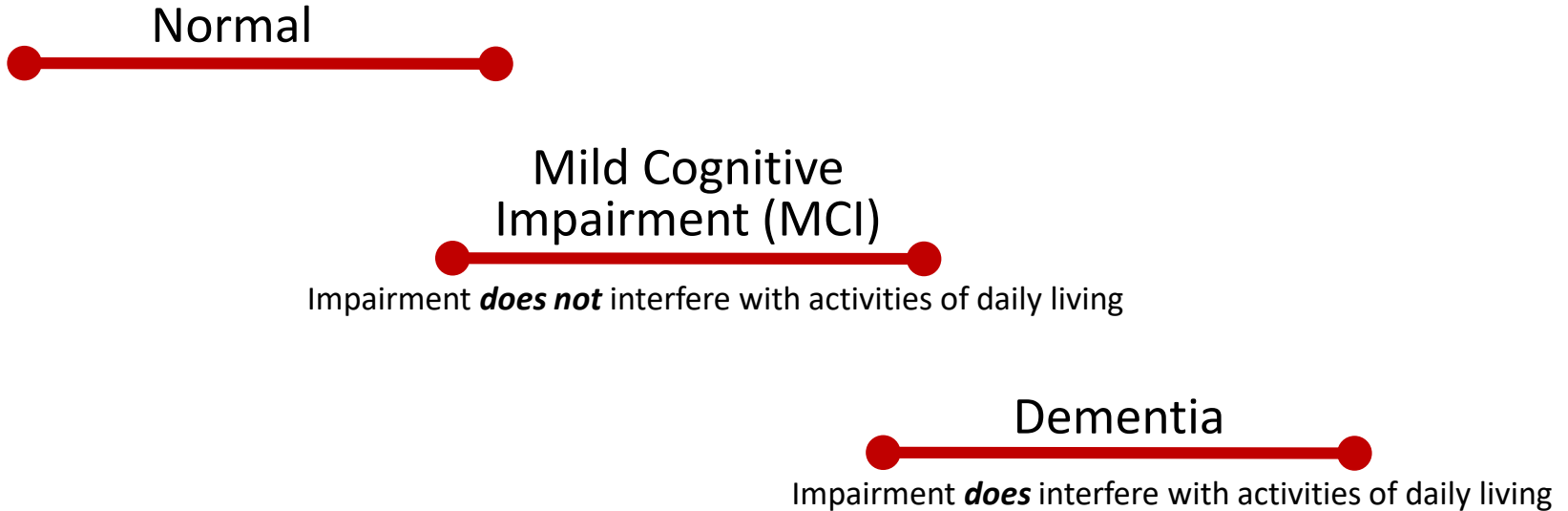


# **Non-motor symptoms Part 2: Cognitive changes in Parkinson disease**

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# Progression of Cognitive Impairment



# What is Normal Aging?

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- Possible changes:

- Occasionally misplace items
- Briefly forget an event
- Trouble recalling names of famous people or movie titles
- Occasionally hunts for a word
- Memory helped with clues
- Occasionally get turned around only in unfamiliar places

- Should stay the same:

- Relatively close with the date
- Arithmetic with pen and paper
- Planning and organization intact
- Good insight and judgement
- Personality
- Mood

# What is Mild Cognitive Impairment?

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Patient is having some cognitive issues:

- Enough to be noticed by the patient or their loved ones
- Represents a change from the patient's baseline
- Objective impairment on cognitive screening
- Not severe enough to interfere with daily functioning
- May or may not progress to dementia

# What is Dementia?

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Syndrome of persistent deficits in at least 2 of the following cognitive domains:

- Memory
- Executive functioning/reasoning
- Visuospatial
- Language
- Personality

Deficits interfere with daily functioning

Deficits are not explained by other medical or psychiatric causes

# Parkinson cognitive impairment is common

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Prevalence of mild cognitive impairment in PD is about 40%

Dementia incidence rates of >80% have been reported in patients followed for more than 20 years after the onset of PD

When severe, dementia surpasses the motor features of PD as a major cause of disability and mortality

# PD Cognitive Impairment

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Slowed thinking

Decreased attention and concentration

Trouble with multitasking, organizing, or planning

Difficulty switching tasks

Decreased initiation of activities

Short term memory problems

Difficulty finding words

Impaired sense of direction or spatial awareness

# Parkinson Disease Dementia Clinical Features

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- Cognitive:
  - Attention
  - Executive function
  - Visuospatial
  - Memory
  - Language
- Behavioral:
  - Apathy
  - Mood
  - Psychosis
  - Excessive sleepiness
  - Sleep disorders (fragmentation, nightmares, RBD)



# Management of Cognitive Symptoms in PD

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Exclude other causes, especially if acute decline

Review medication list for PD and non-PD drugs

Prescribe medications for cognition

Consider non-pharmacological interventions

Evaluate home safety, driving, work abilities

# Medications for PD Cognitive Impairment and Dementia

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Acetylcholinesterase Inhibitors – improve cognitive function modestly

Donepezil (Aricept)

Rivastigmine (Exelon) – FDA approved for PDD

Galantamine (Razadyne)

NMDA Antagonists

Memantine (Namenda)



# Non-pharmacologic treatment for PD Cognition

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Exercise has shown to improve attention and working memory in PD patients without dementia

The efficacy of exercise in improving cognition in PDD is yet to be proven

Lifestyle considerations for helping with cognitive impairment:

Diet: consider the Mediterranean style of diet, with fruits, vegetables, whole grains (limited amounts), lean meats, beans, nuts and olive oil

Exercise: try to get regular exercise, at least 2-3 times per week, about 30 minutes per time. The ideal is 5 times per week at 30 minutes per session.

Mental Health: ensure that you do participate in social activities and interact with people regularly. This also likely helps with brain health.

# Psychosis in Parkinson Disease

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>50% of patients on long term dopaminergic therapy

Significant contributor to nursing home placement, morbidity and mortality

Most common type is visual hallucinations (animals, people), but other sensory modalities and delusions can occur

## Risk factors

Advanced age

Advanced disease

Cognitive impairment

Sleep disturbance

Medications



# Management Strategies for Psychosis in PD

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Treat underlying medical illness

Discontinue medications that may exacerbate hallucinations

Reduce or discontinue PD medications

Non-pharmacologic strategies

Antipsychotics

Acetylcholinesterase inhibitors

# Medication Management of Psychosis in PD

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## Antipsychotics

Quetiapine (Seroquel)

Clozapine (Clozaril)

Pimavanserin (Nuplazid)

## Acetylcholinesterase inhibitors

Donepezil (Aricept)

Rivastigmine (Exelon) – FDA approved for PDD

Galantamine (Razadyne)

# Prognosis of Parkinson Disease Dementia

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Dementia in PD is associated with:

Reduced patient and caregiver quality of life

Reduced survival

Increased risk of nursing home admission

Neuropsychiatric symptoms

# Caregiver Counseling

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As dementia progresses, patients require more oversight

Decision making capacity

Driving safety

Finances

Cooking

Falls

Living alone





# Social Work Considerations

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Workplace accommodations

Disability

FMLA

Advanced care planning

Healthcare Power of Attorney

Durable Power of Attorney

Living Will

DNR

Long term care planning

Patient and caregiver support groups

Home health services

Medical equipment

Connection to community resources

Respite care

Hospice



**Thank You**

