Exploring Non-Motor Symptoms: Neuropathy, Fatigue, and GI Issues

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Poll #1

What best describes your connection to PD?

- Person with PD
- Spouse/Partner
- Parent has/had PD
- Other family member of person with PD
- Friend of person with PD
- Healthcare professional
- Physician/clinician
- Scientist/researcher
- Nurse/nurse practitioner
- Other
Meet the Presenters

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Disclosures

• Steven Swank has no conflicts of interest
• Ellen Walter has no conflicts of interest.
Poll #2

What non-motor symptoms do you experience?

Check all that apply.

Neuropathy
Fatigue
GI Issues
None of the above
Neuropathy

What is neuropathy?
Neuropathy

Related Factors

• Non-Medication related
• Medication related

Look Alikes

• Restless Leg Syndrome
• Deep Brain Stimulation
Neuropathy

Causes as we age:
• Idiopathic
• Vitamin deficiencies
• Diseases
• Cancer
• Medications

Red Flags
• Bone Pain
• Weakness
• Frequent Infections
• Other new symptoms that have no known cause
Neuropathy: Medications

• Medications that may cause neuropathy and/or vitamin deficiencies
  • Chemotherapy (not all)
  • Immune suppressants (not all)
  • Ethanol (alcohol)
  • HIV medication (NRTIs)
  • Amiodarone
  • Colchicine
  • Disulfiram
  • Hydralazine
  • Hydroxychloroquine
  • Metronidazole
  • Nitrofurantoin
  • Phenytoin
  • Others
  • Levodopa and peripheral neuropathy
    • More common in vitamin B12 deficiency (low levels) & high MMA
    • Intestinal gel (i.e. Duopa) more common than oral (pills, tablets)
Neuropathy

Interventions
Are there medications to treat Neuropathy?

- Rule out & treat underlying causes first
- Fall risk assessment for peripheral neuropathy
- Percutaneous electric nerve stimulation
- Vitamin B12 supplementation

- Medications for nerve pain
  - Gabapentin, pregabalin
  - Duloxetine, venlafaxine
  - “TCA” antidepressants
  - Topical: Capsaicin cream, lidocaine cream/patch
  - Onabotulinum toxin (ex. Botox)
- Others
Neuropathy

Is it Parkinson’s Disease, Is it Aging, or Is it Medications?
Fatigue

What Is Fatigue?
Fatigue

PARKINSON’S DISEASE

- Changes in the Brain
- Less Movement
- More Movement
- Medications
- Depression
- Sleep Disorders
Fatigue

Causes as we age

- Unknown Causes
- Deficiencies
- Changes in Lifestyle
- Diseases/disorders
- Cancer
- Depression

Red Flags

- Sudden Onset
- Shortness of breath
- Weight loss
- Signs of abnormal bleeding
- Fever
- Enlarged lymph nodes
- Irregular heart rhythm
Fatigue: Medications*

**Parkinson**
- Dopamine agonists
  - Apomorphine
  - Pramipexole
  - Ropinirole
  - Rotigotine
- Levodopa
- Amantadine

**Mood & Sleep**
- Anxiety (ex. ‘Benzos’)
- Antidepressants
- Antipsychotics
- Mood stabilizers
- Sleep

**Other**
- Allergy
- Heart & blood pressure
- Pain (ex. opioids)
- Muscle relaxants
- Urinary incontinence
- Seizure
- Cancer chemotherapy

* = Not all-inclusive list
Interventions

Are there medications to treat fatigue?

- Rule out & treat underlying causes first
- In Parkinson’s Disease, limited evidence for use of:
  - Rasagiline
  - Methylphenidate (insufficient evidence)
  - Modafinil (insufficient evidence)
Fatigue

Is it Parkinson’s Disease, Is it Aging, or Is it Medications?
GI Issues

What Are GI Issues?
GI Issues

Constipation

Slow gastric emptying

PARKINSON’S DISEASE
GI Issues

Causes as we age:
• Diseases/Disorders
• Surgeries
• Malnutrition/Dehydration

Red Flags
• Pain
• Blood in stool
• Watery stool
• Unintentional weight loss
• Fever
GI Issues: Medications

- Side effects of constipation, nausea, vomiting
- Dehydrating medications and constipation
- Pill burden
- Affects on gut bacteria

- Gastroparesis “slow moving gut” delay of medication
- H.pylori stomach infection and levodopa
- Unable to swallow medication
GI Issues

Interventions

• Rule out & treat underlying causes first
• Refer to specialists when needed
• Non-medicication and medication interventions
GI Issues

Is it Parkinson’s Disease, Is it Aging, or Is it Medications?

- Parkinson’s Disease
- Aging
- Medications
Neuropathy, Fatigue, and GI Issues

When do you seek care and who do you see?
Medication Tips and Resources

- Taking medications **on time** and avoid missing doses
  - Pillbox, Medication alarms/reminders
- Let doctors know about **potential side effects**
  - Avoid “prescription cascade” or “snowball effect”
- Choose **1 pharmacy** to fill all medications (drug interactions)
- Bring a complete and current **medication list** to visits
  - Prescription, non-prescription (OTC), supplements, & vitamins
  - Maintain list as it changes, keep one with you
- **“Aware and Care kit”** (Hospital Kit) from Parkinson’s Foundation
  Parkinson.org/AwareInCare
Take Away Points

- Bring a complete and current medication list to visits
  - Prescription, non-prescription (OTC), supplements, & vitamins

- Do not blame Parkinson’s disease until it is time
  - Know and report the Red Flags

- Share your symptoms with your health care providers
References

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SLIDES

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Symptom Management: Is it PD, Medication or Aging?

Tuesday, February 9th
1pm ET

Motor Symptoms Co-management: Occupational Therapy and Neurology
Michael S. Okun, MD
Lisa Warren, MHS, OTR/L

Tuesday, March 9th
1pm ET

Exploring Neuromotor Symptoms: Neuropathy, Fatigue, GI Issues
Ellen Walter, NP
Steven Swank, Clinical Pharmacist

Tuesday, April 20th
1pm ET

Mental Wellbeing and Memory
Gregory Pontone, MD, MHS

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Fact Sheets
Get the resources and information you need to start living a better life with Parkinson’s. 
[Parkinson.org/Library](https://www.parkinson.org/library)

Podcast: Substantial Matters
New episodes every other Tuesday featuring Parkinson’s experts, treatments, techniques and research. 
[Parkinson.org/Podcast](https://www.parkinson.org/podcast)

Medications: A Treatment Guide to Parkinson’s Disease
Available for download, physical copy or purchase on Kindle. 
[Parkinson.org/Library](https://www.parkinson.org/library) 
[Parkinson.org/Store](https://www.parkinson.org/store) 
[Kindle.com](https://www.kindle.com)
General Resources

Aware in Care Kit
The Aware in Care kit is filled with life saving tools and information to help a person with Parkinson’s during a planned or unplanned hospital visit. Find kit options at Parkinson.org/AwareinCare

National Helpline
Specialists answer calls about all aspects of Parkinson’s in addition to helping you locate your local PD trained allied health professional therapist.
1-800-4PD-INFO
Helpline@Parkinson.org
Mon- Friday 9 am to 8 pm ET

PD Health @ Home
The Aware in Care kit is filled with life saving tools and information to help a person with Parkinson’s during a planned or unplanned hospital visit. Find kit options at Parkinson.org/PDHealth

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