

PARKINSON'S DISEASE AND FATIGUE: A GUIDE FOR CLINICIANS



Phenomenology

- By fatigue we mean a subjective sense of exhaustion, increased effort and lack of energy.
- This is distinct from sleepiness, apathy, depression and cognitive impairment although fatigue may co-exist with these other symptoms.
- If sleepiness (excessive daytime somnolence) or depression are present you may want to treat these first as they can contribute to fatigue.
- It is important to ask people if they have desire to do things but no energy (fatigue) or simply no desire (apathy). These can co-exist and sometimes fatigue contributes to apathy by raising the energetic bar to do things.

For more information on defining fatigue see: Kluger, B. M., Krupp, L. B., & Enoka, R. M. (2013). Fatigue and fatigability in neurologic illnesses: Proposal for a unified taxonomy. *Neurology*, 80(4), 409-416.



Work-up

- History:
 - Clarify what patients mean by fatigue (e.g. energy, sleepiness, apathy)
 - Any related symptoms? (e.g. associated with mood, sleep quality, pain, motor symptoms, light-headedness)
 - Is there any timing to it? (First thing in AM is often sleep disorder; Relation to medications/off time?; With standing or walking consider orthostatic hypotension even if no frank light-headedness)
 - When did it start? (Also, any relationship to starting medications such as dopamine agonist, beta-blockers...)
 - Sinemet may help fatigue in some patients but can be associated with drowsiness in others.
- Sleep study: Even in the absence of sleepiness, fatigue may be a sign of sleep pathology.
- Orthostatic vital signs: Even in the absence of light-headedness, fatigue may be a symptom of orthostatic hypotension, especially in late Spring/early Summer.
- Laboratory studies: TSH, B12, testosterone, CBC, CMP, Vitamin D

For other historical features see: Kluger, B. M., Herlofson, K., Chou, K. L., Lou, J. S., Goetz, C. G., Lang, A. E., Weintraub, D., & Friedman, J. (2016). Parkinson's disease-related fatigue: A case definition and recommendations for clinical research. *Neurology*, 31(5), 625-631.



Talking with Patients

- Patients want to be validated and heard. It is important for them and their family to know that fatigue is common in Parkinson's and related disorders.

PARKINSON'S DISEASE AND FATIGUE: A GUIDE FOR CLINICIANS



Talking with Patients Continued

- Can further validate symptom by discussing how fatigue in PD is different than fatigue in persons without PD in terms of severity, impact on function and unpredictability.
- As with pain, this is a chronic condition that we will likely not fix. It is good to focus on goals and function as well as how fatigue impacts their life.



Nonpharmacologic Therapies

- Supplements including caffeine, L-carnitine, creatine, and ginseng may be considered.
- Energy management strategies to suggest include: doing activities when patients have their best energy (e.g. doing exercise in the morning); dividing activities into doable chunks; spreading their energy stores over the course of a day or week (budgeting their energy where it is most important).
- Exercise
 - Some evidence that strength training, by building capacity, may be particularly helpful for fatigue.
 - Important to do slowly graded exercise (e.g. increase by 5 minutes per week) to avoid rebound worsening of fatigue.
- Sleep hygiene at night and power naps in day can be helpful.
- Acupuncture
- Mindfulness and CBT may also be helpful in managing and living with fatigue.



Medications

- Stimulant medications may be tried and are particularly likely to help if people describe issues with mental fatigue, sustained attention or concentration. One may start with low dose (e.g. methylphenidate 2.5 – 5 mg with breakfast and lunch) and go up as tolerated. These medications may be used as needed. Be cautious if history of coronary artery disease, hypertension or other heart issues (may want to clear with cardiologist).
- Wake-promoting agents such as modafenil are more likely to be helpful for daytime somnolence and typically do not help fatigue outside of effects on sleepiness.
- Amantadine and MAO-inhibitors are rarely helpful for fatigue but worth trying. Despite positive studies effect sizes are generally low.

