

**Subjective:**

**CC** (chief complaint): I've been struggling with anxiety since 2020 after my diagnosis of PD. I'm having trouble coping. I'm depressed because my memory is effected. I'm tired all the time, agitated, sleep deprived at night.

**HPI:** TM is a 66 year old male who presents today with wife. Patient states he was diagnosed with Parkinsons Disease right around COVID in 2020. Anxiety and extreme worrying started around that time. Patients wife states PD was potentially ongoing years prior to diagnosis due to symptoms of shuffling gait, rigidity, short term memory loss, personality changes. Wife states "He is really mean, and is not the man I married!" Patient reports difficult time sleeping where he falls asleep around 8:00pm on the sofa, wakes up to transfer to the bedroom and is awake at 03.00am. He walks around the house at all hours then falls asleep during the day. Sleep cycle very disrupted, intermittent. Wife reports history of night terrors, where he may often strike her.

**Psychiatric History:** Denies major psychiatric history until diagnosis of PD in 2020. Experienced anxiety during first marriage, but thinks it was the result of poor marriage.

Psychotropic trials:

- Buspar – 5 years ago, "only for a couple of weeks"
- Paxil – 2020, not effective

**Hospitalizations:** Denies

**Substance Current Use:**

Alcohol: Admits to 2-3 beers per day, but wife states he does not know when to stop. May turn into 4-8 beers.

Tobacco – Quit 8 years ago

Recreational – Denies, tried CBD gummies once

**Medical History:** Parkinsons Disease (2020), Obstructive Sleep Apnea  
\*Father had PD, died at 92 years.

• **Current Medications:**

Carbidopa/levodopa 25mg/100 mg (2 tabs) PO TID

Cymbalta 60 mg daily

**Allergies:** Denies

### Reproductive Hx:

Son – 30 years old

### ROS:

- GENERAL: Denies weight loss, fever, chills. **Reports weakness and fatigue.**
- HEENT: Eyes: Denies of visual loss, blurred or double vision. Ears, Nose, Throat: Denies hearing loss. **Positive for anosmia and ageusia.**
- SKIN: Denies rash or itching
- CARDIOVASCULAR: Denies chest pain, pressure, palpitations, or edema
- RESPIRATORY: Denies shortness of breath, cough, or sputum
- GASTROINTESTINAL: **Reports occasional abdominal bloating.**
- GENITOURINARY: Denies urinary urgency, discolorations, or odor
- NEUROLOGICAL: **Reports occasional dizziness, ataxia.**
- MUSCULOSKELETAL: **Reports joint stiffness**
- HEMATOLOGIC: Denies abnormal anemia, bleeding, or bruising
- LYMPHATICS: Denies enlarged lymph nodes
- ENDOCRINOLOGIC: Denies abnormal sweating, cold or heat intolerance, polyuria, polydipsia.

### Objective:

#### Diagnostic results:

No laboratory tests were ordered at this time, as the patient has been diagnosed with PD since 2020. To evaluate current anxiety and depression levels, GAD-7 completed, with a score of 15 indicating: severe anxiety. The patient also completed the PHQ-9 screening for severity of depression. His current score was 15, indicating a moderately severe level of depression.

PD is caused by progressive loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (Candel-Parra, et al. 2022). It is a chronic, progressive disease that will eventually affect his quality of life. The authors note that since there is no cure of PD the goal is to minimize symptoms, and improve Health Related Quality of Life (HRQoL). One way to obtain a baseline of functioning is to utilize

the Parkinson's Disease Quality of Life Questionnaire (PDQ-39). The PDQ-39 measures self-reported health status, and quality of life. The higher the score indicates a worse quality of life.

**Assessment:**

**Mental Status Examination:** TM is a pleasant 66 year old, caucasian man who is alert and oriented to person, place, time, and situation. He is clean and appropriately dressed. His gait is steady, with minimal hand tremors. His speech is clear, but halting at times. His mood is reported as anxious and depressed. His affect is congruent with mood. He is noted to smile which his wife states "He never smiles!" He denies auditory or visual hallucinations. His insight, judgement, and impulse control are fair. His memory is impaired with short term memory loss. His attention/concentration is good. His thought process and content is appropriate. No evidence of delusional thinking, denies suicidal or homicidal ideation.

**Diagnostic Impression:**

- **Major Neurocognitive Disorder Due to Parkinson's Disease**
- **Major Depressive Disorder, moderate (F33.1)**
- **Generalized Anxiety Disorder (F41.1)**
- **Insomnia Disorder (F51.01)**

The *primary diagnosis* for this patient is **Major Neurocognitive Disorder due to Parkinson's Disease**. According to the DSM 5 – TR (2022), the patient meets criteria for a Major Neurocognitive Disorder because his wife of 16 years, states:

A. There is significant evidence of cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. There is significant decline in cognitive function; and

2. There is a substantial impairment in cognitive performance as documented by a standardized neuropsychological testing or, in its absence, another quantified clinical assessment.
- B. The cognitive deficits interfere with independence in everyday activities.
  - C. The cognitive deficits do not occur exclusively in the context of a delirium.
  - D. The cognitive deficits are not better explained by another mental disorder.

In addition to meeting the criteria for NCD. We can conclude the NCD is **due to PD** with the following criteria

- A. The criteria are met for major or mild neurocognitive disorder.
  - B. The disturbance occurs in the setting of established PD.
  - C. There is insidious onset and gradual progression of impairment.
  - D. The NCD is not attributable to another medication condition and is not better explained by another mental disorder.
1. There is no evidence of mixed etiology.
  2. The PD precedes the onset of the NCD.

We can attribute the primary diagnosis for the patient because the other symptoms of depression, anxiety, personality changes, insomnia, sleep disturbance, irritability, are all associated features of PD.

## Reflections

TM's medical history is essential in determining his diagnosis and treatment plan. He was diagnosed with PD in 2020. We also learned that his father had PD and died at 92 years old. There is a genetic predisposition for the disease. His wife stated that symptoms were noted a few years prior to official diagnosis. She noted he had classic signs of PD such as stooped posture, shuffling gait, rigidity, tremor, and diminished facial expressions. She states "We had to go to six doctors before they told us what it was!"

They report that the major psychiatric problems like anxiety and depression began after his diagnosis in 2020. According to Apostol et al. (2023), out of 137,000 people with PD (pwP) studied in the UK in 2017, 6%-55% experienced anxiety disorders, 3%-90% experienced depression, and 23% met criteria for anxiety and depression. Researchers in the study used CBT to improve GAD and catastrophic thinking and to improve sleep.

What I learned from this case is that neurocognitive disorders in the elderly population may present as psychiatric conditions. The wife of this patient stated that they had to go to multiple doctors to obtain the correct diagnosis. It was reported the patient has trouble with memory, controlling his drinking, excessive sleeping. Plum et al. (2022) states, frontal behaviors such as executive dysfunction, disinhibition, and apathy, are common in PD. Targeting aspects of depression, cognition, and caregiver burden with medication and psychotherapy may help in adjusting to declining functioning.

One social determinant of health concern for this patient is falls. According to Healthy People 2030, 64.4 deaths per 100K population of persons aged 65 and over were caused by unintentional falls in 2018. It is important to educate the patient and caregivers of how to prevent falls that may be the result of worsening aspects of PD. Advise caregivers of things like removing loose throw rugs, installing grab bars in bathtub or shower, installing night lights, decluttering walk paths are just some things to initiate to reduce trip hazards.

#### Case Formulation and Treatment Plan:

TM is currently prescribed carbidopa/levodopa 25/100 mg PO, TID, duloxetine 60 mg daily, and klonopin 1mg BID, PRN by his current neurologist. He is looking to find a different neurologist due to what he feels is "lack of priority" from current one. He is also looking for a new PCP because he thinks his current one "needs to retire." Patient was referred to different PCP and advised to seek referral for new neurologist. Patient and spouse also referred to local support group for Parkinsons Disease. Referral given for psychotherapist in clinic to address anxiety symptoms, depression, and caregiver role strain.

Risks and benefits of medication discussed. Educated patient and spouse of symptoms associated PD. Discussed side effects of medications including carbidopa/levodopa; such as dizziness, headache, confusion, orthostatic hypotension, xerostomia. Advised to avoid mixing medications such as Klonopin and duloxetine with alcohol. Time allowed for questions and or concerns to plan. Patient and spouse agree with current plan.

Follow up with patient scheduled in two weeks to discuss if new PCP obtained.  
Will refill duloxetine, and klonopin if not provided by PCP.

Patient instructed to go to nearest ED or call 911 if he becomes actively suicidal or homicidal.

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