Depression, Anxiety and Apathy in Parkinson’s Disease

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Non-Motor Symptoms in PD

Traditionally, Parkinson’s disease = tremor, slowed movements, and other *motor symptoms*

However, many regions of the nervous system are impacted in PD → *non-motor symptoms*

*Non-motor symptoms* are broad

- Low blood pressure, temperature intolerance, vision issues, pain, etc.

*Non-motor symptoms* also include changes to mental state:

- low mood, low motivation and/or excessive worrying
- These are primarily driven by *brain chemistry/circuit changes*
Brain Chemistry Changes

In PD, there can be a reduction in many major brain chemicals:
- Dopamine
- Acetylcholine
- Norepinephrine
- Serotonin

Loss of these chemicals can lead to mental state changes:
- Depression
- Anxiety
- Apathy
# Depression - Symptoms

- Depressed mood / persistent sadness
- Crying more
- Loss of interest in or pleasure from activities you once enjoyed
- Feeling worthless or inappropriately guilty
  - Excessively feeling like a burden
- Feeling helpless or hopeless
- Change in eating habits (poor appetite or binge-eating)
- Thoughts of death or harming yourself
### Anxiety - Symptoms

- Persistently feeling nervous, on edge
- Constantly feeling like something bad is going to happen
- Excessive worrying, inappropriate worrying
- Trouble relaxing
- Restlessness, unable to sit still
- Easily annoyed, irritable, prone to anger
- Panic attacks – sudden onset of distress, fear, trouble breathing
- Fear of embarrassment in social situations, avoiding social situations
Apathy - Symptoms

- Lack of motivation or drive to do things
- Lack of enthusiasm
- Feeling of indifference, just don’t care

Can occur with depression, but sometimes on its own without depression

Can accompany cognitive changes
What to do - First Steps

Tell your doctor and/or loved ones if you are feeling these symptoms

- For example, are you more likely to have these symptoms when you are in an OFF state?
- If so, the dopamine medications can be adjusted

Take note:
Are your symptoms persistent/random?
Or are there trends / triggers?
Lifestyle changes

Practically speaking, the most straightforward thing to do is join an exercise class. Yoga, Tai Chi, Rock Steady Boxing, etc.

https://www.rocksteadyboxing.org/
https://pd-connect.org/
https://www.calendarwiz.com/calendars/calendar.php?crd=neurosciencessupportivecare
Davis Phinney Foundation

• [https://www.youtube.com/user/davisphinneyfdn/video](https://www.youtube.com/user/davisphinneyfdn/video)

• Helplessness & Hope in Parkinson's with Judy Long
  • [https://www.youtube.com/watch?v=5X8-5sKG3YQ&ab_channel=DavisPhinneyFoundationforParkinson%27s](https://www.youtube.com/watch?v=5X8-5sKG3YQ&ab_channel=DavisPhinneyFoundationforParkinson%27s)
  • [https://www.eventbrite.com/e/resiliency-for-people-living-with-neurologic-illness-registration-333291442677](https://www.eventbrite.com/e/resiliency-for-people-living-with-neurologic-illness-registration-333291442677) (free class by Judy Long on wellness)

• A Haiku Practice for Mindfulness
  • [https://www.youtube.com/watch?v=dvnY2qUrdM0](https://www.youtube.com/watch?v=dvnY2qUrdM0)
Cognitive Behavioral Therapy (CBT)

- Can be very effective
- Restructures your thought process, avoid thought ‘distortions’
- There are apps on the phone to get started
  - Bloom
  - MindDoc
  - Sanvello
  - CBT Thought Diary
- Find the right therapist for you – don’t stick with someone if you don’t like them
- Psychologytoday.com
Medications

Selective Serotonin Reuptake Inhibitors (SSRIs):
- Citalopram, Sertraline, Escitalopram, Paroxetine, Fluoxetine

Serotonin and Norepinephrine Reuptake Inhibitor (SNRIs):
- Venlafaxine, Duloxetine
- Buproprion, Mirtazapine

For anxiety only:
- Buspirone, Benzodiazepines

Side Effects
- Nausea, diarrhea, dizziness, sexual dysfunction, appetite changes, insomnia, headache

Rare:
- Worsening of motor symptoms

Timing:
- Up to 6 weeks to take effect
Newer treatments

For depression/anxiety:

• Transcranial Magnetic Stimulation
• Ketamine
• Requires discussion with a Psychiatrist
• In research phase:
  • Psilocybin - psilocybinstudies@ucsf.edu

For apathy:

• Modafinil
Q&A