

TraPCAf & Parkinson's Africa Virtual Support Group Series 2024

Session 3: Motor Symptoms of Parkinson's Disease

Session leader:

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From Newcastle. **For the world.**

Outline of session:

- Definition of Parkinson's Disease (PD)
- Causes of PD
- PD Symptoms
- Definition of Motor Symptoms vs. Non-Motor Symptoms
- Managing common Motor Symptoms
- Tips for Managing Motor Symptoms



Defintion of PD

The Mayo clinic defines PD as follows:

Parkinson's disease is a progressive disorder that affects the nervous system and the parts of the body controlled by the nerves.

Causes of PD

Certain nerve cells called neurons in the brain gradually break down or die. Many of the symptoms of Parkinson's are due to a loss of neurons that produce a chemical messenger in your brain called dopamine. When dopamine levels decrease, it causes irregular brain activity, leading to problems with movement and other symptoms of Parkinson's disease.



Causes

The cause of Parkinson's disease is unknown, but several factors appear to play a role, including:

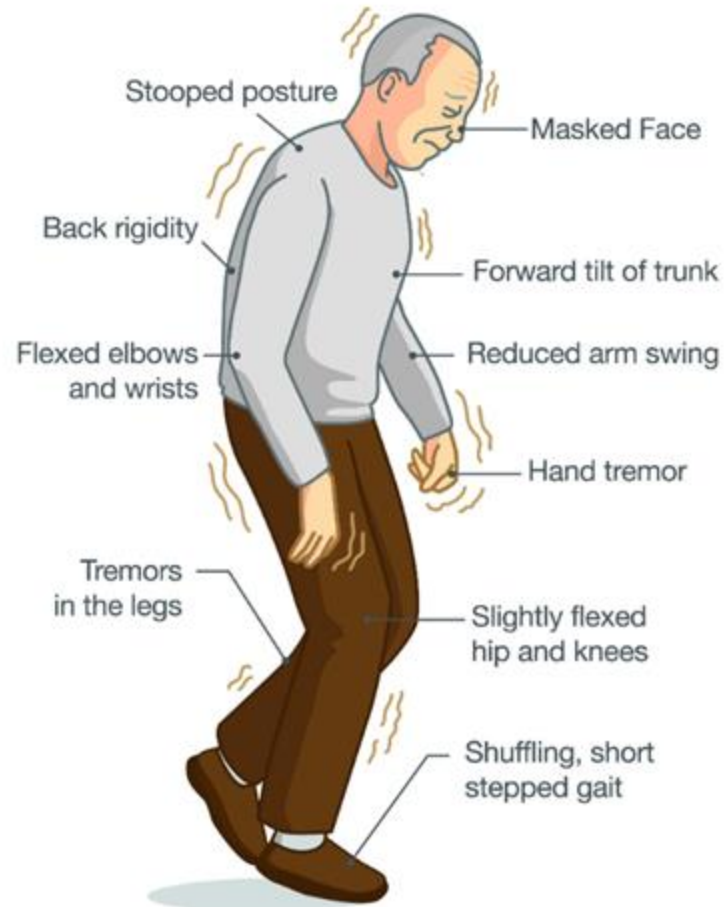
- **Genes.** Researchers have identified specific genetic changes that can cause Parkinson's disease.
- **Environmental triggers.** Exposure to certain toxins or environmental factors
- **Age.** persons above 60
- **Sex.** Males are more likely to be affected by PD than females

Researchers also have noted that many changes occur in the brains of people with Parkinson's disease, although it's not clear why these changes occur. These changes include:

- **The presence of Lewy bodies.** Clumps of specific substances within brain cells are microscopic markers of Parkinson's disease.
- **Alpha-synuclein found within Lewy bodies.** Although many substances are found within Lewy bodies, scientists believe that an important one is the natural and widespread protein called alpha-synuclein, also called a-synuclein. It's found in all Lewy bodies in a clumped form that cells can't break down.



Parkinson's Disease Symptoms



Motor Symptoms

Are those that mostly that affect movements. These include:

- **Tremor.** Rhythmic shaking, called tremor, usually begins in a limb, often your hand or fingers.
- **Bradykinesia.** Over time, Parkinson's disease may slow your movement.
- **Rigid muscles.** Muscle stiffness may occur in any part of your body.
- **Impaired posture and balance.** Your posture may become stooped. Or you may fall or have balance problems as a result of Parkinson's disease.
- **Loss of automatic movements.** You may have a decreased ability to perform unconscious movements, including blinking, smiling or swinging your arms when you walk.
- **Speech changes.** You may speak softly or quickly, slur, or hesitate before talking. Your speech may be more of a monotone rather than have the usual speech patterns.
- **Writing changes.** It may become hard to write, and your writing may appear small.



Non-motor Symptoms

Parkinson's disease is often accompanied by these additional problems, which may be treatable:

- **Thinking difficulties.**
- **Depression and emotional changes.**
- **Swallowing problems.**
- **Chewing and eating problems.**
- **Sleep problems and sleep disorders.**
- **Bladder problems.**
- **Constipation.**
- **Blood pressure changes.**
- **Smell dysfunction.**
- **Fatigue.**
- **Pain.**
- **Sexual dysfunction.**



Managing Parkinson's

- Medicines
- Regular exercising
- Eating a well balanced healthy diet
- Sleep and minimising exposure to stress.
- Stay hydrated
- Physiotherapy,
- Speech therapy



Tips for Managing Motor Symptoms

Motor Symptom	Tips
Tremour	Medications should be taken on time to avoid a lag in off periods Concentrating on an activity Exercising
Bradykinesia	Exercising – dance, yoga, bicycling, swimming
Rigid Muscles	Stretching muscles Exercising Physiotherapy
Impaired posture and balance	Practicing balancing; gait training with a physiotherapist
Loss of automatic movements	Practice in front of a mirror ie, open & close mouth
Speech changes	Practice speaking loudly even shouting Practice diaphragmatic breathing
Writing changes	Take time daily to write a statement or two in the biggest handwriting you can

KEEP MOVING



References

- <https://www.mayoclinic.org/diseases-conditions/parkinsons-disease/symptoms-causes/syc-20376055#:~:text=Parkinson's%20disease%20is%20a%20progressive,stiffness%20or%20slowing%20of%20movement.>
- <https://www.apdaparkinson.org/what-is-parkinsons/symptoms/>
- <https://www.hopkinsmedicine.org/health/conditions-and-diseases/parkinsons-disease/>
- <https://www.nhs.uk/conditions/parkinsons-disease/causes/>
- <https://my.clevelandclinic.org/health/diseases/8525-parkinsons-disease-an-overview>
- <https://www.michaeljfox.org/>
- <https://www.parkinsons.org.uk/>



Thank you!

For more information and resources visit: www.parkinsonsafrica.org

Get in touch if you have a query: tania@parkinsonsafrica.org

Please complete the post session questionnaire!

bit.ly/pvsgs



2024 SCHEDULE

- About Parkinson's & Diagnosis – 11th Jan 2024
- Medication management – 8th Feb 2024
- Motor Symptoms of PD – 14th March 2024
- Non-motor Symptoms of PD – 11th April 2024
- Exercise and movement – 25th April 2024
- Emotional well-being – 9th May 2024
- Caregiver support – 13th June 2024
- Communication and speech – 11th July 2024
- Nutrition and diet – 8th Aug 2024
- Free session/Recap – 12th Sept 2024