



## PARKINSON'S DISEASE

### What is Parkinson's Disease?

Parkinson's disease is a disorder of the brain that leads to shaking (tremors) and difficulty with walking, movement and coordination.

The disease most often develops after age 50. It is one of the most common nervous system disorders of the elderly. Sometimes Parkinson's disease occurs in younger adults, but is rarely seen in children. It affects both men and women.

In some cases, Parkinson's disease occurs in families. When a young person is affected, it is usually because of a form of the disease that runs in families.

### What causes it?

Nerve cells use a brain chemical called dopamine to help control muscle movement. Parkinson's disease occurs when the nerve cells in the brain that make dopamine are slowly destroyed. Without dopamine, the nerve cells in that part of the brain cannot properly send messages. This leads to the loss of muscle function. The damage gets worse with time. Exactly why the brain cells waste away is unknown.

The term "parkinsonism" refers to any condition that involves the types of movement changes seen in Parkinson's disease.

Parkinsonism may be caused by other disorders (such as secondary Parkinsonism) or certain medications.

### What are the symptoms?

The disorder may affect one or both sides of the body. How much function is lost can vary. Symptoms may be mild at first. For instance, the patient may have a mild tremor or a slight feeling that one leg or foot is stiff and dragging. Symptoms include:

- Automatic movements (such as blinking) slow or stop
- Constipation
- Difficulty swallowing
- Drooling
- Impaired balance and walking
- Lack of expression in the face (mask-like appearance)

- Muscle aches and pains (myalgia)
- Problems with movement
  - Difficulty starting or continuing movement, such as starting to walk or getting out of a chair
  - Loss of small or fine hand movements (writing may become small and difficult to read, and eating becomes harder)
  - Shuffling gait
  - lowed movements
- Rigid or stiff muscles (often beginning in the legs)
- Shaking, tremors
  - Tremors usually occur in the limbs at rest, or when the arm or leg is held out
  - Tremors go away during movement
  - Over time, tremor can be seen in the head, lips, tongue, and feet
  - May be worse when tired, excited, or stressed
  - Finger-thumb rubbing (pill-rolling tremor) may be present
- Slowed, quieter speech and monotone voice
- Stooped position

Other symptoms:

- Anxiety, stress, and tension
- Confusion
- Dementia
- Depression
- Fainting
- Hallucinations
- Memory loss
- Oily skin (seborrhea)

### How is it diagnosed?

The healthcare provider may be able to diagnose Parkinson's disease based on your symptoms and a physical examination. However, the symptoms can be difficult to assess, particularly in the elderly. The signs (tremor, change in muscle tone, problems walking, unsteady posture) become more clear as the illness progresses. An examination may show:

- Difficulty starting or finishing voluntary movements
- Jerky, stiff movements
- Muscle atrophy
- Parkinson's tremors
- Variation in heart rate

Reflexes should be normal. Tests may be needed to rule out other disorders that cause similar symptoms.

### How can Parkinson's Disease affect my health?

Untreated, the disorder will get worse until a person is totally disabled. Parkinson's may lead to a deterioration of all brain functions, and an early death. Possible complications:

- Difficulty performing daily activities
- Difficulty swallowing or eating
- Disability (differs from person to person)
- Injuries from falls
- Pneumonia from breathing in (aspirating) saliva
- Side effects of medications

- Changes in alertness, behaviour or mood
- Delusional behaviour
- Dizziness
- Hallucinations
- Involuntary movements
- Loss of mental functions
- Nausea and vomiting
- Severe confusion or disorientation

Contact your health care provider if the condition gets worse and home care is no longer possible.

Most people respond to medications. How much the medications relieve symptoms, and for how long can be very different in each person. The side effects of medications may be severe and may include:

## Treatment

Currently there is no known cure for Parkinson's disease but there are medicines available to restore the balance between dopamine and acetylcholine that can help to control some of the symptoms. The goal of treatment is to control symptoms.

### Medicines:

Control symptoms, mostly by increasing the levels of dopamine in the brain. At certain points during the day, the helpful effects of the medication often wear off, and symptoms can return and then your doctor will need to change the:

- Type of medication
- Dose
- Amount of time between doses
- How the medications are taken

Work closely with your doctors and therapists to adjust the treatment program. Never change or stop taking any medications without talking with your doctor.

Many medicines can cause severe side effects, including hallucinations, nausea, vomiting, diarrhea, and delirium. Monitoring and follow-up by your health care provider is important. Eventually, symptoms such as stooped posture, frozen movements, and speech difficulties may not respond very well to drug treatment.

### Surgery:

Less commonly, surgery may be an option for patients with very severe Parkinson's disease who no longer respond to many medicines. These surgeries do not cure

Parkinson's, but may help some patients:

- In deep brain stimulation (DBS), the surgeon implants electrical stimulators in specific areas of the brain to help with movement.
- Another type of surgery destroys brain tissues that cause Parkinson's symptoms.

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## Your role in managing this condition

Most people with Parkinson's disease can lead a long and busy life. Physical therapy, speech and language therapy and occupational therapy may be beneficial.

Lifestyle changes that may be helpful for Parkinson's disease include:

- Good general nutrition and health.
- Exercising, but adjusting the activity level to meet changing energy levels.
- Regular rest periods and avoiding stress.
- Railings or banisters placed in commonly used areas of the house.
- Special eating utensils.
- Social workers or other counselling services can help you cope with the disorder.
- Try to keep your weight at a normal level as being overweight leads to strain on joints and may affect your mobility.

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## Disclaimer

The reader should always consult a doctor if they believe they may be suffering from this medical condition. The information contained herein is intended to assist understanding and should not take the place of your doctor's advice or instructions. Whilst every effort has been made to ensure the accuracy of the information contained herein, Universal Care does not accept responsibility for any errors or omissions or their consequences, and shall not be liable for any damages suffered arising out of the use of this information.

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