

What is Parkinson disease?

Parkinson disease (PD) is a slowly progressive and chronic process. It mainly affects parts of the brain controlling how you move. Cells in your brain produce an important chemical called *dopamine*. (These cells are in a brain structure called the *substantia nigra*.) When you want to move, dopamine is involved in producing movements that are smooth and coordinated. Many people have symptoms between the ages of 50 and 60 years, but some have symptoms at a much younger age, others at a much older age. Over time, your symptoms will get worse and may change to include more/different symptoms than when you are first diagnosed. This usually happens slowly, over years. As symptoms start to interfere with how you are able to do everyday things, there are treatments that can help you.

What causes Parkinson disease?

For reasons that we don't yet understand, the cells that produce dopamine start to not function properly. They don't make enough dopamine for movements to happen the way they did when there was enough dopamine in the system. To date, no one knows exactly how and why PD starts. Lots of researchers are trying to find the answers. So far it looks as if aging, things in the environment (toxins or poisons) and abnormalities in some genes may trigger the changes in the body that lead to PD.

How is Parkinson disease diagnosed?

A doctor, often a neurologist or family doctor, will take a medical history and examine you. They will make the diagnosis on what they see and on the information you provide them. There is no blood test or laboratory exam that diagnoses PD. An MRI or CT scan may be ordered so the doctor knows that nothing else is going on (tumor, small stroke or other things). Medication is only started when symptoms interfere with what you want to do. Discuss this with your doctor.

What does Parkinson disease look like?

Initially, most people will notice changes on one side of the body. It may be a tremor when an arm or leg is just resting, doing nothing; it might be handwriting getting smaller; it may be a feeling of slowing down; your face may lose some of its expression so you look bored or depressed, even if you are not; or footsteps get smaller. These are just a few common things people notice before they know about Parkinson disease. Everyone is different and your changes are unique to you.

There are four main (motor) symptoms that a doctor will look for in making a diagnosis of Parkinson disease:

- **Tremor** – a trembling or shaking that is involuntary and usually seen in the hands or the legs when they are just resting. (Not everyone with tremor has Parkinson disease and not everyone who has Parkinson disease has a tremor.)
- **Slow movements** (medical term *bradykinesia*) – describes when you want to move, everything is slowed down and it takes more of an effort to move.
- **Rigidity** – stiffness of muscles, usually detected by your doctor or health care team.

- **Difficulties with walking and balance** – footsteps get smaller; you may have a slight limp.

There are many other symptoms that people with PD may experience (though not always nor all of them) as time goes on. These include:

- Constipation
- Mood Changes
- Memory and Thinking Changes
- Changes in Swallowing
- Sleep Disturbances
- Fatigue
- Changes in Speech

If you experience any of these, Parkinson Association of Alberta has specific information handouts that may be helpful to you.

Help yourself live well with PD by:

- arming yourself with good information
- finding a supportive group of family or friends
- exercising (continue or start!)
- making sure that you keep your health care team up to date on how you are doing

Remember – you are unique! How PD looks on you will not be identical to someone else with PD. While there is not yet a cure for PD, there are many options available to help you live life to the fullest. Parkinson Association of Alberta is here to help.