

## WHAT IS PARKINSON'S DISEASE?

Dr. James Parkinson, a London doctor, first described Parkinson's in 1817. Parkinson's disease (PD) is a slowly progressive disorder that can affect a person's physical movements, and other functions within the body that are not visible from the outside.

The area of the brain affected is the substantia nigra, meaning black substance. A neurotransmitter called dopamine is made in this part of the brain. Neurotransmitters are responsible for sending messages between brain cells. Dopamine allows nerve impulses to travel from one nerve cell to another, sending messages to the muscles; these messages control movement. When 50-80% or more of the dopamine-producing cells in the brain are lost, symptoms of PD begin to appear.

Research is being done all over the world to better understand what causes PD, and to find a cure. As of now, most scientists agree that the cause includes a combination of genetics and environmental factors. A lot of progress has been made towards improving medical treatment. PD is not contagious, and only a very small number of children with a parent with PD will go on to develop the disease.

There are approximately 100,000 Canadians living with PD, and the average age of diagnosis is 60. However, up to 10% of individuals will develop symptoms before age 40, and 20% before age 50.

### Symptoms and Treatment

PD can vary greatly between people, and symptoms can show up slowly over time. Some of the common symptoms include:

- shaking of a hand or arm (tremor)
- stiffness in the muscles that makes it difficult to move (rigidity)
- slowness of movement and balance (bradykinesia)
- quieter voice (hypomimia)
- smaller handwriting (micrographia)
- feeling tired (fatigue)
- body pains
- depression and anxiety
- difficulty thinking clearly

Treatment for PD is always improving, and there are doctors, nurses, physiotherapists, social workers, and speech therapists available to help people with PD enjoy a happy, active life.

Many different kinds of medications can be used to help with PD symptoms. Sometimes, these medications have side effects that can make people feel unwell, with an upset stomach, dizziness, or sleepiness. However, most side effects can be improved by finding the right combination of medications.

### Effects on the Family

A PD diagnosis in the family can be extremely difficult to deal with, especially when the person diagnosed is your parent. It is normal to feel angry, sad, resentful, frustrated, or guilty. There may be more stress in your home due to changes in your parents' symptoms, future plans, and finances. Talk

with your parents about how you feel, and tell them your concerns. Together, solutions can be worked out. Remember, none of this is anyone's fault.

You may have new tasks or responsibilities in the house that you would not have otherwise had to do. The ways you spend time with your parent may change, and it is important to look at different ways to stay connected. Try creating new activities that you can do together. PD may make it necessary to change your perspective, and your expectations of your parent and your family life.

**What can you do?**

- Consider having regular family meetings so you can share with your parents how this is affecting you, and work together to find solutions.
- Talk to someone you feel a connection with (a friend, relative, teacher, counselor, coach, or neighbour). Talking about your concerns or worries may help you feel better.
- Get involved. Sometimes, we feel better when we take action to improve a situation. Try organizing a fundraiser to support PD research, participate in your community's fundraisers, or raise awareness of PD at your school or community centre.
- Consider making a connection with others your age who may be experiencing similar issues—you are not the only one who has a parent with PD.
- Stay involved in exercise and other interests. You may even want to consider yoga and meditation to help with stress and mindfulness. Be sure to eat well, get lots of rest, and continue to have fun!

—

*Prepared by Elaine Book, MSW, Clinical Social Worker, Pacific Parkinson's Research Centre.*