

## Parkinson's disease

Parkinson's disease is a degenerative disorder which is classified as part of a group of conditions known as motor system disorders. This age-related disease occurs as a result of the inability of the nerve cells in the brain to produce enough amount of dopamine which is a neurotransmitter necessary for controlling body movement and balance. Due to the effects of the disease on day-to-day activities, the need for assisted living often increases as the disease progresses.

There are two common features of all cases of Parkinson's disease, and they are:

- It is progressive – the condition gets worse as it persists.
- It is chronic – it continues for a long period of time.

## Causes of Parkinson's disease

The death or impairment of dopamine-producing cells in the substantia nigra has been identified as the main cause of Parkinson's disease. As these cells die or become impaired, the transmission of motor signal from the substantia nigra to other relay centers in the brain becomes severely affected; hence, initiation and maintenance of fine, coordinated movement suffer. When the loss of these cells continues, the symptoms of the condition become worse.

The following factors are responsible for the development of Parkinson's disease:

- Genetic disorders – Parkinson's disease sometimes runs in a family due to the presence of defective genes.
- Abnormality or damage of mitochondria which affects its ability to produce energy needed for bodily functions.
- Exposure to harmful chemicals in the environment. These chemicals include heroin, haloperidol and reserpine.

## Symptoms of Parkinson's disease

- Rigidity and increased muscular tone

- Tremor of the arms, hands, jaw, face and legs
- Difficulty in coordinating and maintaining balance
- Bradykinesia – slowness of movement

There may also be symptoms of dementia in many patients of Parkinson's disease. Dementia is a broad term used for describing a chronic decline in mental ability and it generally affects reasoning, memory and personality. Along with other symptoms, patients can also experience, depression, sleep disorders and difficulty in talking, swallowing, walking, chewing and performing simple day-to-day tasks. Notably, as the symptoms get worse, patients will be faced with more difficulty in executing simple activities; therefore, patients and caregivers often have to work together to help the patients.

## **Treatments of Parkinson's disease**

Foremost, patients and caregivers must note that this disease is incurable, it can only be managed. There are different methods of taking care of a patient with Parkinson's disease.

Levodopa and carbidopa are often used as medications to relieve the symptoms of this disease. Other drugs such as amantadine, dopamine agonists, COMT inhibitors and anti-cholinergic can also be used for relieving the symptoms. However, the potency of these drugs reduces after some years of repeated usage and certain side effects may also manifest. Exercise, diet and surgery are also sometimes utilized to manage Parkinson's disease.

Whatever the case may be, most patients of Parkinson's disease require assisted living as this is the most suitable way to relieve patients and caregivers of the problems associated with the condition. For residents of Knoxville and its neighboring areas, we offer assisted living facilities for memory care and Parkinson's disease.