

## **Parkinson's Disease**

Parkinson's Disease is a progressive disease and can manifest through different symptoms. Common motor symptoms include tremors, slowness of movement, balance issues when standing or walking and muscle stiffness. Other symptoms include having a quiet voice, early fatigue, reduced legibility of handwriting, stooped posture, problems with bowel movement as well as sleep problems.

Parkinson's Disease occurs when there is a problem with certain brain cells located within the basal ganglia. Normally, these cells make dopamine, which is important for the control of body movement. Symptoms of Parkinson's Disease are caused by reduced levels of dopamine in the brain. The cause of the disease itself, however, is unknown, but studies have shown that there may be associations to general ageing, genetics and environmental factors.

There is no cure for Parkinson's Disease, which will ultimately affect one's cognition, movement, talking, eating and day-to-day living skills. Complications such as falls and chest infections may then arise and can have severe, even fatal, consequences.

The symptoms and development of Parkinson's disease will vary from person to person, depending on the severity of the disease. Some will be able to lead normal lives with proper management, while others may have more severe symptoms and require modifications in their daily lives as well as physical assistance from dedicated caregivers. Medicine and targeted therapy can help reduce symptom burden and help patients live the best life they can, for as long as possible.

### **How is it treated?**

Treatment of Parkinson's Disease includes:

1. Medical: Medications can help to alleviate certain symptoms. As symptoms progress, these medications may need to be reviewed and changed by your primary physician.
2. Surgical: Some people with Parkinson's Disease may benefit from a form of surgery called Deep Brain Stimulation.
3. Rehabilitation: Exercise is very important in maintaining the mobility of patients with Parkinson's Disease. Regular exercises help to slow down the progression of the disease, improve patients' living skills and their overall quality of life.

### **What does rehabilitation involve?**

Targeted therapy and education from either the physiotherapists, speech therapists and occupational therapists can help to optimize a patient's independence, safety and overall quality of life.

- Physiotherapy can help to improve overall gross movement, flexibility and balance
- Occupational therapy can help to improve safety within a patient's living environment and encourage participation in daily activities
- Speech therapy can help to improve with voice control during speech and swallowing during eating

Therapists may provide recommendations on equipment use, dietary changes, and strategies to improve safety during movement, eating or drinking.

We also offer scientifically-proven programmes such as the Lee Silverman Voice Treatment (LSVT) that can help with speech (LSVT LOUD) and limb movement (LSVT BIG). These are intensive, structured programmes that are carried out by our certified therapists in the outpatient setting. Outpatient LSVT maintenance groups are also currently offered for patients who require speech therapy to maintain their communication abilities.

After referral by the doctors, therapists will assess the patients' mobility and function. The therapists will start therapy with the aim of achieving the patients' personal goals. This may be done in either an inpatient or outpatient setting.

**Useful websites**

[Parkinson's causes](#)

[Parkinson's disease – symptoms and causes \(Mayo Clinic\)](#)

[LSVT Global](#)

[Parkinson Society Singapore](#)