

**The most obvious features of Parkinson's are the motor symptoms, or a person's ability to move. These symptoms are often the first thing that a person notices.**

**It is commonly thought that medication alone is the only form of treatment for these symptoms, but physiotherapy has a vital role in helping people achieve "normal" movement and mobility.**

## **Movement Symptoms**

The classic movement symptoms of Parkinson's include:

- Slowness of movement
- Rigidity
- Tremor
- Loss of balance

These symptoms can exist in varying degrees from person to person and certainly vary in severity for each individual as the condition progresses.

These symptoms are caused by the loss of **dopamine production** in the brain.

Dopamine is a chemical that helps fuel the brain's ability to move without having to consciously think about it.

In other words, Dopamine is like the brain's auto-pilot—without this chemical, a person with Parkinson's must concentrate on every single movement that they want or need to make.

Over the years, there has been increasing evidence to support the important role that physiotherapy can play in helping people with Parkinson's achieve "normal" movement, as well as maximise their overall physical condition.

## **What is physiotherapy?**

Physiotherapy is a health care profession that provides treatment to individuals to develop, maintain and restore maximum movement and function throughout life.

### **Physiotherapy for Parkinson's**

The physiotherapy treatment approach for Parkinson's is three-pronged:

1. One approach is focused on teaching a person movement strategies to help them achieve independent mobility.
2. Another is focused on ensuring optimal condition of a person's strength and fitness .
3. Physiotherapy treatment for Parkinson's also involves assessing and treating people for balance and falls prevention.

### **1. Movement Strategies**

Many people with Parkinson's have been found to have difficulty with complex tasks that require many *sequential* movements, such as getting out of bed.

Although it appears to be a simple task, getting out of bed is actually made up of many separate steps that need to be done in sequence to achieve the desired result.

# **PHYSIOTHERAPY AND PARKINSON'S**

Physiotherapists can help teach people with Parkinson's how to *manage* these movements by following six simple rules.

1. Movement in Parkinson's is normal. It just requires activation.
2. Break down complex movements into simple parts and perform each part separately.
3. Concentrate on one movement at a time
4. Think about the movement before you do it
5. As well as while you're doing it
6. Use cues to trigger movement.

These rules can be applied to all movements, including walking, getting out of bed and getting up from a chair.

By concentrating on each movement, you are no longer relying on the "auto-pilot" part of the brain, and therefore movements can be more easily achieved.

## **2. Strength and Fitness**

The other area that impacts on a person's ability to move freely is their general physical condition.

If a person is weak, has poor posture or poor balance this will certainly impact on a person's ability to move independently.

Symptoms of rigidity and slowness of movement—typical in Parkinson's—can lead to muscle tightness and tend to make people move less. As a result, people can become physically weak and develop poor posture.

It is very important for people with Parkinson's to participate in regular physical activity that helps them maintain a good level of fitness as well as targeting vulnerable muscle groups.

### **Muscle groups to pay attention to:**

- Neck muscles – good strength and flexibility will help ensure good posture and help maintain balance.
- Upper back – strength and flexibility in this area are important for posture.
- Chest – stretching open your chest will help prevent rounded shoulders
- Buttock and thigh muscles – good strength in these areas will assist with standing straight, getting out of chairs, moving in bed and walking.
- Calf muscles – regular stretching is important for walking and balance.

## **3. Balance**

It has been estimated that up to 40 percent of people with Parkinson's fall during the course of their disease and as a result 18 percent of this group suffer a fracture.

## **PHYSIOTHERAPY AND PARKINSON'S**

Parkinson's can reduce the body's automatic response to loss of balance. An example might be when someone pushes you, you automatically take a step to keep your balance. People with Parkinson's can lose this unconscious response.

Not only can a physiotherapist prescribe exercises to improve balance, but they can teach strategies to help prevent an individual from falling, and how to manage if they have fallen. With this in mind, it is very important to see your doctor and physiotherapist if you feel that your balance is worsening.

### **In Summary:**

- There is significant research supporting the value of physiotherapy for Parkinson's.
- Movement strategies can help people achieve normal movement.
- Regular exercise is important to help maintain fitness, ease of movement and good posture.
- Exercise is also helpful in treating loss of balance and subsequently in preventing falls.

### **To access a physiotherapist contact:**

- Your treating G.P or Neurologist
- Movement Disorder Clinics
- Community Health Centres

For a contact list of Movement Disorder Clinics or Community Centres that can assist in managing Parkinson's, please visit the Parkinson's Victoria website: [www.parkinsons-vic.org.au](http://www.parkinsons-vic.org.au) and go to "**Help Finder**".

The Help Finder also lists physiotherapists practicing in Regional Victoria who are familiar with Parkinson's.

**For more information about Parkinson's and physiotherapy or if you have any question in relation to Parkinson's, please contact Parkinson's Victoria.**