# information

# SLEEP AND PARKINSON'S

Parkinson's is a progressive neurological condition, which is characterised by both motor (movement) and non-motor symptoms.

Sleep disturbance is a very common feature of Parkinson's with a reported frequency of 60-90%. Sleep changes are challenging for both the person with Parkinson's and their sleep partner leading to fatigue and impacting on quality of life.

# Sleep disturbances associated with Parkinson's include:

- Bed mobility changes
- Rapid Eye Movement Behaviour Disorder
- Restless Leg Syndrome
- Sleep Apnoea
- Sleep fragmentation (broken sleep)
- Vivid dreams and nightmares

## Bed mobility changes

Parkinson's affects automatic skills such as getting in and out of bed, rolling over and moving up and down the bed. Muscle rigidity, especially of the trunk, adds to this problem and can result in impaired bed mobility overnight. The use of satin nightwear or satin sheets is helpful. A review by an occupational therapist is recommended. They can introduce strategies and equipment which will be of benefit. A medical review of medications may assist with overnight mobility.

# Rapid Eye Movement Behaviour Disorder (RBD)

This disorder often presents long before the diagnosis is made with 20-40% of people with Parkinson's describing a long history of disturbed sleep pattern with rapid eye

movement behaviour disorder (RBD). RBD is included in the Parkinson's Associated Risk Syndrome (PARS) and it is now generally accepted that RBD is a manifestation of early changes in the brain stem which have not yet progressed to the point that it affects the brain structures leading to the motor signs of Parkinsonism.

Excessive movement during the dream phase of sleep is a common feature which leads to acting out of dreams and can result in sleep talking, shouting and intense and sometimes violent movements. This contrasts with the restricted speech pattern and movements evident during waking hours. These night time occurrences often lead to partners sleeping in separate beds or rooms. Discussion with the treating medical specialist is recommended.

# Restless Leg Syndrome (RLS)

This occurs in the general population but is reported in approximately 20% of those living with Parkinson's and involves uncomfortable sensations and the urge to move one's legs particularly overnight. RLS can be treated by Parkinson's medications. Investigations for iron or ferritin deficiency are recommended

## Sleep Apnoea

Sleep apnoea has been observed in 20-40% of people with Parkinson's referred to a sleep clinic. This condition features loud snoring or gasping with resulting sleep disturbance and daytime fatigue for both sleep partners. Discussion with your treating medical specialist and assessment at a sleep clinic are recommended. Treatment may be the use of a continuous positive airway pressure (C-PAP) machine.

# Sleep fragmentation (broken sleep)

Night time awakenings occur for a variety of reasons in Parkinson's and it is essential to assess for a regular pattern or cause. Common causes include:





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- The breakthrough of motor symptoms, such as tremor, stiffness or muscle rigidity, may be due to a wearing off of medication. Discussion with the treating medical specialist and a review of medications may be required.
- Early morning dystonia or cramping of the lower limbs is a common occurrence and should be reported. Discussion with the treating medical specialist and a review of medications may be required
- Nocturia (passing urine overnight) may become more frequent and resettling to sleep may become more difficult. Fluids should not be restricted throughout the day. For males, regular prostate examinations and blood tests are recommended.
- Depression can lead to a disturbed sleep pattern and should be discussed with the General Practitioner or specialist.

Sleep hygiene measures such as a regular sleep schedule, a regular exercise programme and a reduction in daytime napping may assist. Alcohol and caffeine and other stimulants should be avoided in the evenings. Suitability for sleeping tablets must be assessed on an individualised basis as they may cause increased day time drowsiness and increase the risk of falls.

## Vivid dreams and nightmares

These may occur frequently and may be increased by the medications used in the management of Parkinson's. If the nightmares are disturbing the treating medical specialist may adjust the timing or dose of the medications. Less commonly, nightmares may be carried over into the wakening period and may be described as parasomal hallucinations.

In addition to night time sleep disturbances other changes may occur. These include:

- Daytime fatigue
- Excessive day time sleepiness
- Sleep attacks

# Daytime fatigue

Fatigue is a disabling, poorly understood and under diagnosed symptom of Parkinson's which may precede the motor symptoms. There is no correlation between the severity of fatigue and the progression of the condition. If depression is present and treated the associated fatigue may improve. There is little else known in the area of fatigue.

# Excessive day time sleepiness (EDS)

Approximately 50% of people with Parkinson's experience EDS. This may be related to the use of dopamine agonists in the management of Parkinson's therefore monitoring and reviewing medications is vital.

As Parkinson's progresses periods of daytime sleepiness are extended and this is thought to be due to changes in the mid brain. EDS is associated with more advanced Parkinson's, longer duration of levodopa therapy and cognitive decline.

# Sleep attacks

Sudden onset sleep has been described as occurring while eating or driving. All Parkinson's medications can be responsible but the dopamine agonist family are the most common cause. It is essential that any sleep attacks are reported to the treating medical specialist.

## Sleep benefit

In contrast to sleep changes or challenges it is important to acknowledge the often under reported sleep benefit. Sleep benefit is characterised by a clear improvement in motor performance and the general condition of the person with Parkinson's before they take their first dose of Parkinson's medications. The length of time can vary and gradually wears off. The reason for this is unknown.

Parkinson's Australia is a federation of member organisations including Parkinson's ACT, Parkinson's Queensland, Parkinson's SA & NT, Parkinson's Tasmania and Parkinson's WA.

