

# Parkinson's Disease Information Sheet 2.7 Sleep and Parkinson's Disease

Parkinson's Australia

**Idiopathic Parkinson's disease** (Pd) is a progressive neurological condition which is characterised by motor (movement) and non-motor symptoms.

Sleep changes are reported by 90% of people with Parkinson's (PWP) and often pre-date the diagnosis. These changes and disturbances may be related to Pd or due to the medications used in its treatment.

Sleep changes are challenging for the PWP and their sleep partner. They can lead to fatigue for both partners and impact on quality of life.

Pd causes specific changes to night sleep pattern in addition to physical comfort changes. These include:

- Sleep fragmentation (broken sleep)
- Rapid Eye Movement Behaviour Disorder (RBD)
- Restless Legs Syndrome (RLS)
- · Bed mobility changes
- Vivid dreams and nightmares
- Sleep apnoea

## **Sleep Fragmentation**

PWP usually settle to sleep shortly after retiring but experience broken sleep. This is often associated with the breakthrough of Pd related motor symptoms (tremor, stiffness and rigidity) as a result of a wearing off of medication.

Early morning dystonia (cramping), usually of the lower limbs is a common occurrence. These experiences should be reported to the treating specialist. An adjustment of medications may be suggested.

Nocturia (passing urine overnight) may become more frequent and PWP may have problems resettling. In addition, depression (which is commonly experienced in Pd) can result in early morning insomnia. These aspects should be discussed with the GP or treating specialist.

# Rapid Eye Movement Behaviour Disorder

Rapid Eye Movement Behaviour Disorder (RBD) is characterised by excessive motor activity during the dream phase of sleep. PWP can experience vivid dreams which they may act out, in some cases violently. This can contrast to the impaired mobility during the day. Another aspect of RBD is talking during sleep (nocturnal vocalisation). This can involve a loud speech pattern which contrasts with daytime reduced volume. RBD often leads to partners sleeping separately.

# **Restless Legs Syndrome**

Restless Legs Syndrome (RLS) involves uncomfortable sensations and the urge to move the legs. This affects 20% of PWP and also occurs in people without Pd. In some cases Pd medications (for example, dopamine agonists) may be of benefit. Many people benefit from non-medical treatments.

## **Bed Mobility Changes**

Pd affects the ability to carry out automatic movements such as rolling over in bed. Rigidity, especially of the trunk, adds to this difficulty and results in some PWP being unable to move easily overnight. The use of satin nightwear and/or satin sheets will be beneficial. The input of an occupational therapist and the provision of a self-help rail for the bed will assist.

#### **Vivid Dreams and Nightmares**

Vivid dreams and nightmares are commonly experienced by PWP and may be exacerbated by medications used for Pd. If nightmares are disturbing, the treating specialist may review the timing of medications.

Less frequently, dreams or nightmares can be carried over to the waking period and may be confused with hallucinations.

#### Sleep Apnoea

Sleep apnoea is a common cause of sleep disturbance in the general population and is experienced by many PWP. Assessment by a sleep clinic and appropriate treatment is recommended.

In addition to nighttime sleep disruptions PWP can experience:

- Daytime fatigue
- Excessive Daytime Sleepiness (EDS)
- Sleep attacks

# **Daytime Fatigue**

Fatigue is a disabling, poorly understood and under-diagnosed symptom of Pd. There is no clear association between the severity of fatigue and severity of motor symptoms, disease progression or dosage of medications used to treat the condition. Fatigue may precede the appearance of motor symptoms.

Depression (which is commonly experienced in Pd) can result in early morning insomnia leading to daytime fatigue. If depression is treated effectively, fatigue may improve.

# **Excessive Daytime Sleepiness**

Up to 50% of PWP experience excessive daytime sleepiness (EDS) despite a good night's sleep. Causes related to EDS include the disease process, medications and sleep disruption. EDS can be caused by changes in the mid-brain and are more common with longer duration Pd and cognitive changes.

# Sleep Attacks

Sleep attacks is a relatively newly reported occurrence. It is defined as falling asleep without warning. Sleep attacks have been described as occurring while eating or driving. It is generally accepted that all Pd medications may be responsible but dopamine agonists are a more common culprit. Reporting the occurrence of sleep attacks to the treating specialist is essential.

# **Practical Advice to Promote Sleep**

- Take regular exercise.
- Introduce relaxation or yoga techniques to prepare for sleep.
- Adopt a regular evening and bedtime routine.
- Avoid stimulants such as caffeine and alcohol before bedtime.
- Avoid a large meal immediately before bedtime.
- Schedule a routine afternoon nap if affected by EDS.

Sleep changes should be discussed with the treating specialist. Many PWP use night-time sedation however this must be assessed on an individual basis. Medications which may cause daytime sleepiness and an increased risk of falls must be used carefully.

For further information please contact your state Parkinson's organisation: FREECALL 1800 644 189

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