

## **SLEEP AND PARKINSON'S DISEASE**

Sleep difficulties affect about 60-90% of patients with Parkinson's disease (PD), and may manifest as disturbed overnight sleep or daytime sleepiness. Several studies confirmed that disturbed sleep has significant negative consequences on the overall quality of life.

The most common sleep disorders among PD patients are:

1. Sleep maintenance insomnia: The most common sleep disturbance in PD, characterized by fragmented overnight sleep.
2. REM sleep behavior disorder (RBD): During RBD, patients tend to act out their dreams. Vivid dreams may provoke loud vocalizations and motor behaviors that may lead to injuries of both patients and their bed partners.
3. Sleep apnea syndrome: This is a condition associated with snoring and breathing pauses, and numerous micro-awakenings during night.
4. Daytime sleepiness: This is a very common complaint of patients with PD. Excessive daytime sleepiness may result in so-called "sleep attacks" that may occur while driving, leading to serious accident.

Major contributors to sleep problems among PD population are: medication side effects, re-emergence of motor symptoms throughout the night, co-existent primary sleep disorders, and PD progression itself. Although common, sleep disorders in PD are under-reported by patients, and under-diagnosed by physicians. It is therefore very important that patients discuss their sleep complaints with their physician.

Treatment approaches may involve changes in anti-parkinsonian medications or introduction of medications with sedating properties in order to facilitate sleep. In our Center we are committed to the timely diagnosis and treatment of sleep disturbances. We also have several research projects related to sleep disturbances in PD, and we welcome patient participation.

Appropriate sleep hygiene is the initial and necessary step that leads to a good overnight sleep.

## SLEEP HYGIENE INSTRUCTIONS

- Get regular exercise each day.
- A warm drink may help you relax and fall asleep.
- Keep a regular time out of bed 7 days a week.
- Keep clock face turned away, and do not find out what time it is when you wake up a night.
- Do not eat or drink heavily for three hours before bedtime. A light bedtime snack may help.
- If you have trouble with regurgitation, be especially careful to avoid heavy meals and spices in the evening. Do not retire too hungry or too full.
- Keep your room dark, quiet, well-ventilated, and at a comfortable temperature throughout the night.
- Use a bedtime ritual. Reading before lights-out may be helpful if the reading material is not occupationally related.
- List problems and one-sentence next steps for the following day. Set aside a specific worry time. Forgive yourself and others.
- If you wake at night, do not try too hard to sleep; instead, concentrate on the pleasant feeling of relaxation.
- Use stress management in the daytime.
- Avoid unfamiliar sleep environments.
- Be sure mattress is not too soft or too firm, and pillow is right height and firmness.
- Use bedroom only for sleep; do not work or do other activities that lead to prolonged arousal.
- If possible, make arrangement for night-time (sleep-time) care-giving activities (for children, others, pets) to be assumed by someone else.