

## Save citation to file

Format:

Summary (text)

Create file

Cancel

FULL TEXT LINKS



[Eur J Neurol](#). 2016 Aug;23(8):1275-88. doi: 10.1111/ene.13015. Epub 2016 May 10.

# Night-time sleep in Parkinson's disease – the potential use of Parkinson's KinetiGraph: a prospective comparative study

[L Klingelhoefer](#)<sup>1 2</sup>, [A Rizos](#)<sup>2</sup>, [A Sauerbier](#)<sup>2</sup>, [S McGregor](#)<sup>3</sup>, [P Martinez-Martin](#)<sup>4</sup>,  
[H Reichmann](#)<sup>1</sup>, [M Horne](#)<sup>3 5</sup>, [K R Chaudhuri](#)<sup>2</sup>

Affiliations

PMID: 27160044 DOI: [10.1111/ene.13015](#)

## Abstract

**Background and purpose:** Night-time sleep disturbances are important non-motor symptoms and key determinants of health-related quality of life (HRQoL) in patients with Parkinson's disease (PD). The Parkinson's KinetiGraph (PKG) can be used as an objective measure of different motor states and periods of immobility may reflect episodes of sleep. Our aim was to evaluate whether PKG can be used as an objective marker of disturbed night-time sleep in PD.

**Methods:** In this prospective comparative study, data from PKG recordings over six consecutive 24 h periods are compared with Hauser diaries and scales focusing on motor state, sleep and HRQoL in PD patients. Thirty-three 'non-sleepy' PD patients (PD-NS) were compared with 30 PD patients presenting with excessive daytime sleepiness (PD-EDS). The groups were matched for age, gender and Hoehn and Yahr state.

**Results:** In the PD-EDS group subjective sleep reports correlated with the PKG's parameters for quantity and quality night-time sleep, but not in the PD-NS group. There were no significant correlations of the night-time sleep quantity parameters of the Hauser diary with subjective sleep perception, neither in the PD-EDS nor in the PD-NS group.

**Conclusions:** This first PKG based study of night-time sleep in PD suggests that PKG could be used to provide an easy to use and rough evaluation of aspects of night-time sleep and one that could flag patients where polysomnography may be required. In sleepy PD patients for instance, quantity and quality PKG parameters correlate with different aspects of sleep such as insomnia, parasomnia and restless legs syndrome.

**Keywords:** Parkinson's KinetiGraph; Parkinson's disease; actigraphy; non-motor symptoms; sleep.

## Related information

[MedGen](#)

## LinkOut – more resources

### Full Text Sources

[Ovid Technologies, Inc.](#)

[Wiley](#)

### Other Literature Sources

[scite Smart Citations](#)

### Medical

[Genetic Alliance](#)

[MedlinePlus Health Information](#)

### Miscellaneous

[NCI CPTAC Assay Portal](#)