

## OPTIMIZING CONTROL OF NIGHTTIME SYMPTOMS IN PARKINSON DISEASE

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Parkinson's disease (PD) patients frequently suffer from difficulty falling asleep, poor quality sleep, frequent nighttime awakenings, and early arousal.<sup>1</sup> Sleep fragmentation is common in PD occurring three times more commonly than in healthy controls.<sup>2</sup> This is multifactorial but is often due to a return of motor symptoms during the night with tremor, an inability to move in bed, stiffness, dystonia and cramps. REM sleep behavior disorder (RBD) occurs in about a third of patients with PD and represents a parasomnia characterized by a loss of the normal skeletal muscle atonia during REM sleep, thus enabling patients to physically enact their dreams.<sup>3</sup> In addition, restless legs syndrome, nocturia, depression and dementia may interfere with sleep. Poor nighttime sleep may result in impaired performance during the day, excessive daytime sleepiness and poor quality of life.

Early and accurate identification of sleep dysfunction is essential for appropriate treatment. The Parkinson's Disease Sleep Scale (PDSS) is a recently developed validated instrument designed to evaluate quality of sleep in PD.<sup>4</sup> In some cases polysomnography (PSG) may be required to identify factors related to sleep disruption in PD.

The treatment of PD symptoms during the night is often difficult and requires a multi-pronged approach. The treatment of nocturia, depression and management of nighttime hallucinations with atypical antipsychotics may help. RBD often responds to clonazepam<sup>5</sup> and there are reports of response to pramipexole.<sup>6</sup> Treatment of RLS with dopamine agonists is often beneficial. Dopamine agonists, such as pramipexole, that have a long half-life can improve sleep as a result of improvement in PD-related nocturnal motor disability. However, dopaminergic therapy can have a negative impact on the sleep architecture and may cause excessive daytime sleepiness.<sup>7</sup> The role of once daily formulations of pramipexole, ropinirole and rotigotine needs to be studied further. Deep brain stimulation of the subthalamic nucleus may also improve sleep quality.

### References

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