

Distressing Dreams: Can It Be a Sign of Parkinson's Disease?

By Terry Ann Donner, RN, JD, CCM, CSA

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People with Parkinson's disease often experience vivid dreams in which they may strike out in their sleep, try to kick or defend themselves or even flee from an aggressor or animal. These dreams are usually not reported to the physician, and occur years to decades before they are diagnosed with the traditional motor symptoms of Parkinson's disease.

Key takeaways:

- Sleep disturbances are one of the most prevalent non-motor symptoms of Parkinson's disease.
- Some sleep disturbances in Parkinson's disease may be due to symptoms of the disease, such as muscle rigidity, urinary frequency at night, anxiety, and depression.
- Medication used to treat Parkinson's disease may cause sleep disturbances.
- Disturbances in REM sleep, such as nightmares and violent dreams can foreshadow the development of Parkinson's disease symptoms several years to decades before they present.
- Early reporting of sleep disturbances will allow your physician to create an individualized plan of care for you that

includes diet management, physical activity and supporting healthy sleep habits to delay the onset of symptoms in Parkinson's disease.

What is Parkinson's disease?

Parkinson's disease is a progressive neurocognitive disorder that results in many motor symptoms, including:

- Hand tremors;
- Weak voice;
- Muscle rigidity;
- Gait disturbances;
- Balance issues.

As Parkinson's disease progresses, many people develop **sleep disturbances, anxiety, depression and dementia**. Parkinson's disease has been linked to the lack of dopamine, a neurotransmitter and hormone, that transmits information across nerve cells. Cells that produce dopamine in the substantia nigra of the hypothalamus at the base of the brain die — **creating a deficiency of dopamine**.

Causes of sleep disturbances in Parkinson's disease

Sleep problems occur in **2 out of 3 people with Parkinson's disease**. Sleep problems are one of the most frequent non-motor symptoms and an **early sign of Parkinson's**. Some of the sleep disturbances associated with Parkinson's disease are the result of other symptoms of the disease. Pain due to muscle rigidity and urinary frequency during the night can cause insomnia and sleep disturbances.

In addition, anxiety and depression — often diagnosed in Parkinson's Disease — result in either insomnia or daytime tiredness.

Medications that are used to treat the dopamine deficiency in Parkinson's Disease can also cause sleep disturbances.

Sinemet is a combination of levodopa, a building block for dopamine, and carbidopa, which prevents the breakdown of levodopa. It is frequently used to replenish dopamine levels. Sinemet can cause insomnia if taken **too close to bedtime**.

Despite sleep disturbances being so prevalent, approximately **72% of those with Parkinson's disease do not report these non-motor symptoms** to their physicians. It is important that such information be reported so that early interventions can be taken to help **prolong the progression of the disease process**.

Adjusting diet, improving the quality of sleep and increasing activity are all things that have been shown to **improve dopamine levels** in the early stages of Parkinson's disease, and possibly prolong the onset of more serious, debilitating symptoms.

Disturbing dreams and diagnosing Parkinson's disease

Sleep disorders are not only one of the most frequent non-motor symptoms of Parkinson's disease, but the **frequency and severity often increases as the disease progresses**. Sleep disturbances in Parkinson's disease are risk factors for cognitive decline. Those with Parkinson's disease commonly have REM sleep behavior disorder (RBD). REM stands for rapid eye movement. It is the stage of sleep where dreaming occurs.

Those with a disorder of their REM sleep or RBD may have **dreams so vivid that they are described as nightmares**. During these nightmares, the person is often fighting off an attacker, defending a loved one or being chased by someone or something. The person experiencing RBD will begin to act out the dream, **yelling, fighting, kicking or punching the perceived attacker**.

Unfortunately, this "attacker" may be the unwitting spouse, who was asleep next to this person when the dream started. **This can be very dangerous**.

Research on disturbing dreams and Parkinson's

In 2022, the results of a large study of older men living in community without a diagnosis of Parkinson's disease, but having disturbing

dreams was published. Those men exhibiting distressing nightmares, which they often acted on, **were at 3 times the risk of developing Parkinson's disease 5 to 7 years later.**

A prior study, published in 2021 showed that 81% of those who were experiencing intense dreams or nightmares — and were already diagnosed with Parkinson's disease — reported that their dreams had begun **several years to decades prior** to the onset of muscle rigidity, gait disturbances or other motor symptoms. One of the implications of the study is that screening for these vivid dreams or nightmares, may not only identify those who are at risk of developing Parkinson's disease, but may also allow the **development of an individualized care** plan geared towards slowing the onset of motor symptoms with diet and physical activity modifications.

Disturbing dreams and cognitive decline in Parkinson's disease

Recent studies have also found that sleep studies in those with Parkinson's disease — especially for those experiencing dreams with physical aggression or animals — are associated with **lower scores on cognitive tests** that relate to the brain's frontal lobe functions.

Two longitudinal studies have preliminarily found that those with nightmares or intense dreams and Parkinson's disease had **lower scores on cognitive tests and an increased**

risk of developing dementia at 2 and 4 year follow-ups. The caveat in both of these studies is that the sample sizes were small, so further exploration is needed.

The value in early reporting of nightmares or disturbing dreams is **proving to be significant** as these non-motor symptoms may foreshadow the later development of the motor symptoms or cognitive decline and dementia associated with Parkinson's disease. Identifying such risk factors for your physician, will allow for **earlier intervention that may prolong the development of Parkinson's motor and cognitive symptoms**. An individualized care plan that provides appropriate sleep aids, a diet high in foods that **support the production of dopamine** and physical activity to increase body strength and decrease inflammation, can all be instituted to stave off the development of Parkinson's disease symptoms as long as possible.

Resources:

1. [Distressing dreams and risk of Parkinson's disease: a population-based cohort study.](#)
2. [Dream content predicts motor and cognitive decline in Parkinson's disease.](#)
3. [An overview of sleep and circadian dysfunction in Parkinson's disease.](#)

4. Barriers to reporting non-motor symptoms to health-care providers in people with Parkinson's.
