

Does Physical Activity Affect Early Prodromal Parkinson Symptoms?

A long-term study suggests so.

Researchers sought to uncover a potential relationship between physical activity and prodromal features of Parkinson disease (PD) — features that precede the clinical diagnosis — using the Nurses' Health Study and the Health Professionals Follow-Up Study. Participants were followed from 1986 through 2012, with assessments at baseline and longitudinally at many consecutive 24-month periods thereafter.

The odds of manifesting three or more prodromal features associated with later emergence of PD were approximately 35% lower in the cohort of patients classified at the study baseline in the highest quintile of physical activity compared with the lowest quintile. These prodromal features were constipation, probable REM sleep behavior disorder, excessive daytime sleepiness, depression, and pain. Certain prodromal features — hyposmia and impaired color vision — were not associated with physical activity.

COMMENT

The authors note previous research showing that more physical activity is associated with a decreased risk for later Parkinson disease. The current findings add to the literature by examining the effects on prodromal symptoms. An important weakness of this study was that prodromal features were not present at baseline. Additionally, early loss of dopamine in these patients may have contributed to less exercise. However, the authors highlight similar odds in a recent meta-analysis on physical activity and risk for PD, which showed a 34% lower risk with the highest rate of activity versus the lowest. Collectively, the evidence suggests that exercise is a reasonable recommendation for those at risk or worried about their risk for Parkinson disease. — *Michael S. Okun, MD*

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