Parkinson's Disease

Parkinson's disease is a progressive disorder of the central nervous system that results in tremor, slowed movement, and muscle rigidity. There is no cure for PD, but some conventional medications are available to treat symptoms of the disease.

In surveys, patients with Parkinson's report cannabis to be highly efficacious at mitigating disease symptoms, particularly in the treatment of non-motor symptoms.\(^1\)\(^2\)\(^3\) Observational trial data supports these claims. Investigators at Tel Aviv University, Department of Neurology evaluated Parkinson's disease symptoms in subjects at baseline and 30-minutes after inhaling cannabis. In one trial, researchers reported that inhaled cannabis was associated with "significant improvement after treatment in tremor, rigidity, and bradykinesia (slowness of movement). No significant adverse effects of the drug were observed."\(^4\) In another trial, investigators reported that cannabis inhalation – both short-term and long-term – was associated with improved pain relief.\(^5\)

In a separate, retrospective observational trial, researchers assessed the daily use of cannabis in 47 patients with Parkinson's disease over a period of several months (ranging from three months to 84-months). Most (82 percent) of the patients reported that medical cannabis "improved their overall symptoms." Specifically, cannabis administration was associated with reductions in pain, stiffness, and tremor as well as with improvements in mood and sleep quality. Participants were also less likely to report suffering from falls after initiating cannabis use. Authors concluded, "[T]he results of our study demonstrate that most of the users had found MC (medical cannabis) to improve their condition, and that MC treatment was safe, without major side effects."\(^6\)

The administration of isolated cannabinoids also likely addresses various PD symptoms. According to a series of case summaries published in the *Journal of Clinical Pharmacy and Therapeutics* in 2014, daily cannabidiol treatment reduced symptoms REM sleep behavior disorder (RBD) in patients with Parkinson's.\(^7\) Placebo-controlled clinical data further reports that CBD administration is associated with improved "quality of life" and "well being" in PD patients.\(^8\) The compound has also been shown to mitigate symptoms of psychosis in patients with the disease.\(^9\)

As a result, some experts in the field now speculate that "various cannabinoids or other compounds targeting the endogenous cannabinoid system might be useful in the treatment of PD symptoms."\(^10\)

REFERENCES

1 Finseth et al. 2015. Self-reported efficacy of cannabis and other complementary medicine modalities by Parkinson's disease patients in Colorado. Evidence-Based Complementary and Alternative Medicine [open access publication].


