Effects of acute cannabidiol administration on anxiety and tremors induced by a Simulated Public Speaking Test in patients with Parkinson’s disease.

de Faria SM, de Morais Fabricio D, Tumas V, Castro PC, Ponti MA, Hallak JE, Zuardi AW, Crippa JAS, Chagas MHN.

Abstract

BACKGROUND: Cannabidiol (CBD) is one of the main components of Cannabis sativa and has anxiolytic properties, but no study has been conducted to evaluate the effects of CBD on anxiety signs and symptoms in patients with Parkinson's disease (PD). This study aimed to evaluate the impacts of acute CBD administration at a dose of 300 mg on anxiety measures and tremors induced by a Simulated Public Speaking Test (SPST) in individuals with PD.

METHODS: A randomised, double-blinded, placebo-controlled, crossover clinical trial was conducted. A total of 24 individuals with PD were included and underwent two experimental sessions within a 15-day interval. After taking CBD or a placebo, participants underwent the SPST. During the test, the following data were collected: heart rate, systemic blood pressure and tremor frequency and amplitude. In addition, the Visual Analog Mood Scales (VAMS) and Self-Statements during Public Speaking Scale were applied. Statistical analysis was performed by repeated-measures analysis of variance (ANOVA) while considering the drug, SPST phase and interactions between these variables.

RESULTS: There were statistically significant differences in the VAMS anxiety factor for the drug; CBD attenuated the anxiety experimentally induced by the SPST. Repeated-measures ANOVA showed significant differences in the drug for the variable related to tremor amplitude as recorded by the accelerometer.

CONCLUSION: Acute CBD administration at a dose of 300 mg decreased anxiety in patients with PD, and there was also decreased tremor amplitude in an anxiogenic situation.

KEYWORDS: Cannabidiol; Parkinson’s disease; anxiety; tremor

PMID: 31909680 DOI: 10.1177/0269881119895536
Effects of acute cannabidiol administration on anxiety and tremors induced by a Simulated Public Speaking Test in patients with Parkinson's disease.