Title: A RANDOMIZED CLINICAL TRIAL OF LOW-DOSE CANNABIS EXTRACT IN ALZHEIMER'S DISEASE

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Background: Alzheimer's disease (AD) is closely linked to the accumulation of neurotoxins derived from Aβ and tau and to cognitive impairment. The premise of this project is that the imbalance in the endocannabinoid system occurs in an AD-dependent manner. The connection between dementia, inflammation, Aβ and alterations in the cannabinoid system in experimental models of AD has been reported. Cannabinoid microdoses can restore baseline brain function while avoiding the main side effects.Despite extensive research into new AD therapies, no significant improvement has been achieved recently, and there is virtually no consensus on how scientists will innovate to shed light on a new treatment. treatment. Currently, there are no published studies examining the effect of microdoses on human AD pathology. Therapy based on therapy has emerged as crucial for the treatment of many diseases considered incurable. The expected results of this project will provide important information on the ability of cannabinoid microdoses to compensate for neurochemical imbalance during the progression of AD, thus improving memory performance, as well as how they can affect inflammation. memory performance and how they can affect inflammation, as well as the levels of as well as Aβ and tau levels.The key point is to provide evidence that cannabinoid microdoses can serve as an effective treatment for AD, while at the same time while avoiding the main side effects. The aim of this project is to determine the effect of cannabinoid microdoses in AD patients, with the aim of assessing memory and cognition. It is hoped that the results will establish that cannabinoid microdoses are critical to re-establishing the baseline function of the endocannabinoid system in the AD brains and its beneficial effects. This project could be instrumental in validation of new therapeutic approaches for AD.

Aim: To analyze the progression of the disease, as well as the clinical, biochemical and cerebral blood perfusion effects of using microdoses (micrograms) of THC and CBD contained in a solution of Cannabis sativa extract in patients with Alzheimer's disease.

Hypotheses:

1) There is no effect of microdoses of cannabinoids (THC and CBD) for the AD condition;

2) There are effects of microdoses of cannabinoids (THC and CBD) for the condition of AD.

Registration:

This study is registered on the Brazilian platform for clinical trials ReBEC under the number U1111-1258-2058

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