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Conversion from cannabinoid decoction to oil: a single-center experience

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Abstract

Introduction: Cannabinoid-based therapies, particularly cannabis oil and decoction, have shown efficacy in treating various conditions due to their therapeutic properties. Cannabis oil, rich in THC and CBD, interacts with the endocannabinoid system, offering precise dosing and higher bioavailability, while decoction provides a broader spectrum of cannabis constituents with lower bioavailability.

Method: A retrospective evaluation was conducted on patients undergoing cannabinoid therapy at our center from January 2022 to May 2024. This study aims to investigate the success rate of oil-based cannabinoid therapy in patients previously treated with decoction, following the introduction of Farmalabor® THC 1% oil. Evaluated endpoints include failure and dropout rates, incidence of side effects, and patient satisfaction. The percentage of THC extraction via decoction varies substantially, from 16 mg/kg to 935 mg/kg, with an average of 221 mg/kg. We used a precautionary ratio of 100 mg Bedrocan® to 2 mg Farmalabor® 1% THC oil.

Results: From January 2022 (T0), 89 patients using tea were switched to oil while maintaining the same concentration of THC. At the end of the rotation process (T1), 6 patients refused the oil therapy and were referred for a psychiatric consultation, which documented a high risk of abuse, leading to the suspension of the therapy. Another 8 patients experienced reduced efficacy with the oil, so a new rotation back to tea was proposed. Psychiatric contraindications were not found in these patients. Among the 8 patients, 7 are affected by multiple sclerosis and achieved better control of spasm-related pain with the decoction. Six months after the treatment, adherence to the therapy was 100%, with a satisfaction rate of 89%. Patients treated with oil experienced an improvement in pain management compared to the previous treatment with tea, with a reduction in the average NRS (Numerical Rating Scale) from 6.7 to 4.3. Additionally, better adherence to the treatment was recorded, with greater stability of benefit and convenience of use. No side effects were recorded from the use of the oil.

Conclusion: The 1% THC oil treatment demonstrated superiority over tea in terms of efficacy, safety, and adherence to therapy in our study. This finding aligns with the literature, which indicates that oil is more stable than decoction and has a higher THC extraction rate. The dropouts were patients with a psychiatric abuse disorder, making cannabinoid treatment absolutely contraindicated for them. For the patients who needed to return to taking tea, the main reason was poor pain relief coverage.

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