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Cannabis Information Sheet

This document contains important information about the therapeutic use of cannabis as provided by Integr8 Health. Please read it carefully, and ask any questions about the information it contains *before* you decide to participate in ketamine treatment.

What is Cannabis?

Cannabis sativa is a plant that produces flowers containing a large number of physiologically active compounds, including the cannabinoids (e.g. THC and CBD) as well as terpenes, flavonoids, and others. Cannabis has been used as a medicine for millennia by societies around the world and its safety and therapeutic effects have been extensively studied in the modern scientific literature.

Dosing Strategies and Route of Administration

Cannabis can be administered via a variety of routes, including inhalation via smoke or vaporization, oral consumption, sublingual or oromucosal delivery, and topical or transdermal application. Routes vary in the onset, bioavailability and duration of effects.

A single dose of cannabis can produce observable acute effects, which depend on the dose and preparation of the cannabis. Different preparations vary widely in their capacity to produce effects that may include euphoria, impairment, relief of a variety of symptoms, and adverse effects.

The choice of dose and route of administration also depends on multiple factors, including patient preference, therapeutic goals, and prior exposure to cannabis.

The Cannabis Psychoactive Experience

Cannabis that contains significant levels of THC can cause a psychoactive effect that ranges in intensity from mild to intense. People describe euphoria, open-mindedness, enhanced sensory capacity, body sensations like tingling, increased appreciation of normal activities, distortion of time, and others. Cannabis can also cause or intensify uncomfortable experiences like anxiety, dizziness, and paranoia.

Monitoring Progress

To ensure safety, patients treated with cannabis must attend follow up visits as specified by their medical provider based on the patient's individual needs, and to respond to communications from our office. Patients must promptly inform the office of any exacerbation symptoms or adverse effects.

Impairment

Like other psychoactive drugs, after starting THC-containing cannabis and after each dosage increase, avoid driving or operating machinery until you know how a particular dose affects you. When a person is impaired from cannabis, they are usually aware of this impairment and able to make a good decision about whether they are safe to drive, engage in hazardous activities, or make legal decisions.

Because cannabis can impair reaction time and potentially lead to an accident, I recommend that patients avoid driving or operating other machinery while using cannabis, until you are confident in your response to a particular preparation and dosage. There are no standard breath, urine or blood tests that can be used to determine cannabis intoxication, but an officer would administer roadside sobriety tests to determine if driving is impaired by cannabis.

The impairing effects of cannabis are typically pronounced in those new to cannabis, and diminish with experience. Those who experience impairment often describe dizziness, clumsiness, or confusion.

Potential Risks of Cannabis

The adverse effects of cannabis use are within the range tolerated for other medications. Cannabis is a non-toxic, non-lethal medicine. Researchers have found that the doses of longterm cannabis required to produce toxicity and death in animals were so high it would be nearly impossible for a human to consume such quantities via ingestion or inhalation.

Medical cannabis users do experience more adverse side effects than patients receiving placebo. According to a recent review article published in the Journal of the American Medical Association, the most commonly reported side effects are dizziness, dry mouth, nausea, fatigue, sleepiness, euphoria (excitement and happiness), depression, vomiting, diarrhea, disorientation, anxiety, confusion, impaired balance, hallucination, and paranoia. Strangely, that review article failed to include impaired short-term memory, a commonly reported side effect (sometimes adverse, sometimes beneficial) in our patients.

You may notice that many of the adverse effects reported are the same as the symptoms wellknown to be relieved by cannabis. These paradoxical adverse effects are typically related to overdose with cannabis. Cannabis can cause temporarily increased heart rate and decreased blood pressure. For most patients, these effects are mild and tolerable. In patients with severely unstable cardiovascular disease (e.g. inability to climb a flight of stairs), these side effects could be harmful.

Research has shown that adverse effects are most common in new cannabis users, during stressful environmental conditions, and after consumption of large doses of cannabis. My colleagues and I have found that almost all side effects of cannabis are related to using excessive dosage, and less often, choosing the wrong preparation or delivery method. We've developed effective solutions to help most patients avoid and resolve any side effects they are experiencing.

Dependence and Addiction:

Illicit cannabis use has been shown to cause dependence, but it is likely that appropriate medical use does not carry the same risk. Even so, the rates are modest, with 9% of illicit cannabis users becoming dependent, compared to 15% of alcohol users or 32% of nicotine users. The addictive potential of cannabis is likely comparable to caffeine. Cannabis use can also cause withdrawal symptoms when abruptly stopped, including anger, aggression, decreased appetite, anxiety, restlessness, and sleep difficulties, including strange dreams. These symptoms occur in ~50% of cannabis users, emerge 1-2 days after cannabis cessation and resolve in 1-2 weeks. Most patients compare the severity of cannabis withdrawal to caffeine withdrawal.

Long-term Exposure and Psychological Side Effects:

The existing research on the long-term side effects of medical cannabis use and our clinical experience has failed to demonstrate any concerning long-term effects when cannabis is used correctly. Research has shown that cannabis does not cause any lasting cognitive impairment in adults – cognitive function measures return to baseline after a month of cannabis cessation in adult non-medical users, and cognitive function tends to improve over time in medical users.

Cannabis has been shown to both relieve the symptoms of bipolar disorder, and to increase the risk of developing bipolar mania – again, dosage and preparation selection are the key factors in this effect. There is scant evidence that cannabis use is associated with (but not the cause of) psychosis, but the incidence is very low: 1 case in 2,800 heavy cannabis using men age 20-24 (the highest risk group), and only 1 case in 10,000 light cannabis users in the same age group. Again, this data emphasizes the importance of finding your optimal dose.

Cannabis Overdose:

In our clinic, the most common adverse effects are related to consuming cannabis edibles. If you do accidentally overdose on cannabis, be reassured – even incredibly high doses of cannabis fail to produce brain damage, organ damage, or other types of physical toxicity,

though they can cause delirium and hallucinations, which can be quite uncomfortable. Just remember these effects will pass, usually within 4-24 hours. If you find yourself in this unfortunate situation, the best strategy is to get yourself into a safe and peaceful environment.

Alternative Procedures and Treatments

FDA-approved medications and non-pharmacological treatments like psychotherapy or osteopathic manipulation can be used to treat the same symptoms and conditions typically treated with cannabis. Please inform your provider if you would like treatment with or referral for a therapeutic alternative to cannabis.