Post-Traumatic Stress

Post-traumatic stress disorder (PTSD) is a psychiatric health response to a traumatic event. Symptoms of post-traumatic stress may include flashbacks, nightmares, and severe anxiety, as well as uncontrollable thoughts about the event. These symptoms may persist long after the triggering event, and may be unresponsive to conventional therapeutic treatments. An estimated one in ten Americans suffers from post-traumatic stress.

The endogenous cannabinoid system is believed to play a "critical role ... in the etiology of PTSD in humans." Researchers theorize, "Cannabis may dampen the strength or emotional impact of traumatic memories through synergistic mechanisms that might make it easier for people with PTSD to rest or sleep and to feel less anxious and less involved with flashback memories. ... Evidence is increasingly accumulating that cannabinoids might play a role in fear extinction and anti-depressive effects."[3]

Placebo-controlled clinical data assessing cannabis' impact on PTSD is not yet available. Observational data provide mixed results. A retrospective review of patients' symptoms published in 2014 in the Journal of Psychoactive Drugs reported a greater than 75 percent reduction CAPS (Clinician Administered Posttraumatic Scale) symptom scores following cannabis therapy.[4] But a larger observational study of PTS subjects reported that "those who never used marijuana had significantly lower symptom severity four months later than those who continued or started use after treatment."[5] Similarly, a 2015 case-control study found no association between self-reported cannabis use and mental health symptom severity in a cohort of Veterans with probable PTSD.[6] As a result, experts presently advise physicians to “use their own clinical judgment when weighing the potential risks and benefits for a particular patient.”[7]

Small clinical trials assessing the use of individual cannabinoids have shown success in PTS treatment. A 2014 Israeli trial reported that the adjunctive administration of orally absorbable THC "caused a statistically significant improvement in global symptom severity, sleep quality, frequency of nightmares, and PTSD hyperarousal symptoms" in a cohort of ten subjects.[8] Separate trials report that the administration of nabilone, a synthetic cannabinoid, safely mitigates various symptoms of post-traumatic stress, including insomnia, chronic pain, and treatment-resistant nightmare.[9-10]

Consequently, some investigators now believe that targeting the endogenous cannabinoid system may "provide a foundation upon which to develop and validate informative
biomarkers of PTSD vulnerability, as well as to guide the rational development of the next generation of evidence-based treatments for PTSD.”[11]

REFERENCES


