Chapter 42
Cannabis Withdrawal

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Introduction

Cannabis withdrawal occurs after cessation of prolonged and heavy cannabis use. Prior to DSM-V, cannabis withdrawal had not been recognized as a separate syndrome. Intense daily use of cannabis increases the risk of cannabis dependence and the risk of cannabis withdrawal after cessation. Earlier initiation of cannabis use, increased use of more potent forms of cannabis (e.g. the flowering heads of the female cannabis plant) and frequent use of water-pipes may lead to increased serum levels of tetrahydrocannabinol and a higher risk of dependence. Cannabis withdrawal causes functional impairment which is dependent on symptom severity, and is predictive of relapse to cannabis. Onset of symptoms is usually within 24–48 h of abstinence, typically reaching a peak within the first week.Symptoms may persist for up to 3–4 weeks. Withdrawal symptoms may cause discomfort, distress and functional impairment and are a significant barrier to achieving abstinence.

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K.D. Nordstrom, M.P. Wilson (eds.),
Quick Guide to Psychiatric Emergencies,
https://doi.org/10.1007/978-3-319-58260-3_42,

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Symptoms

- Anxiety
- Sleep difficulty (e.g. insomnia, nightmares)
- Decreased appetite or weight loss
- Depression
- Abdominal pain
- Sweating
- Fever
- Chills
- Headache

Signs

- Irritability, anger or aggression
- Depressed affect
- Nervousness or anxiety
- Restlessness
- Shakiness/tremor
- Constricted or blunted affect
- Diaphoresis

Life-Threatening Symptoms/Signs

The cannabis withdrawal syndrome is not life threatening and it is not associated with significant medical or psychiatric consequences.

Differential

- Anxiety syndrome, panic attack
- Depression
- Other substance intoxication or withdrawal
- Primary insomnia
- Side effect to medication
- Metabolic derangement

Treatment

Treatment is supportive that may address intolerable symptoms such as insomnia.

- There are no accepted pharmacotherapies for the treatment of cannabis withdrawal or cessation.
- The most promising are the newer tetrahydrocannabinol agonists, such as nabiximols and nabilone.
- Non-cannabinoid medications used to treat other substance-use disorders (clonidine, naltrexone, nefazodone, mirtazapine, bupropion, venlafaxine, divalproex, lithium, oxytocin, quetiapine, baclofen) have been largely negative for cannabis withdrawal.
- The evidence base for the anticonvulsant gabapentin and the glutamatergic modulator N-acetylcysteine is weak, and need further investigation.

Long-Term Treatment

- Most consistent evidence supports combination of Motivation Enhanced Therapy and Cognitive Behavioral Therapy with abstinence-based incentives (Cochrane Database).
- Harm reduction model may include switching to cannabidiol (CBD), a cannabinoid analogue.

Tool

Additive/ impurity	**Comment**
Cocaine, PCP	Adulterant to increase potency
Daminocide	Plant growth regulator banned by California as a carcinogen
Isopentane	Residual solvent used in the extraction for cannabis concentrates
Paclobutrazol	Pesticide not registered with EPA for use on food crops
Paraquat	Herbicide, causes Parkinson’s disease

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