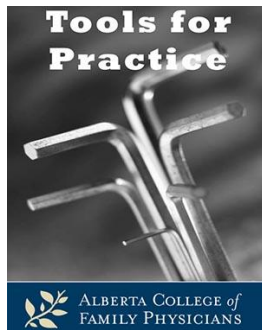


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Blazing Through the Evidence on THC Versus CBD Combinations in Medical Cannabinoids.

Clinical Question: Do tetrahydrocannabinol (THC), cannabidiol (CBD), or the THC/CBD combination yield differing benefits or harms?

Bottom Line: From four randomized controlled trials (RCT), one found THC/CBD superior to THC but this was inconsistent within study and with other studies. Adverse events are prevalent in THC/CBD and individual components. While some early poor-quality research in healthy users suggest CBD may attenuate some psychiatric effects of THC, better research in real patients is needed to verify any benefits of specific components.

Evidence:

Identified four RCTs comparing THC, CBD, or combined.

- RCT: 243 terminal cancer and weight loss patients, comparing THC/CBD versus THC versus placebo over six weeks.¹
 - THC/CBD versus THC: No statistical difference in appetite or adverse events.
- RCT: 177 refractory cancer pain patients on strong opioids (~270 mg morphine), comparing THC/CBD versus THC versus placebo over two weeks.²
 - $\geq 30\%$ pain reduction: 38% THC/CBD versus 21% THC, Number Needed to Treat=6.
 - No difference for $\geq 10\%$ or $\geq 50\%$ pain reduction.
 - Adverse events: No difference with THC/CBD versus THC.
- RCT: 48 brachial nerve injury patients, comparing THC/CBD versus THC versus placebo over two weeks.³
 - Baseline pain 7.5/10: Both THC/CBD and THC groups reduced pain ~1.3 points, statistically significantly more than 0.6 with placebo.
 - Adverse events not significantly different between THC/CBD and THC.
- 'N of 1' RCT: 24 chronic pain patients who benefitted from THC/CBD, compared THC/CBD versus THC versus CBD versus placebo over eight weeks.⁴
 - Patients reporting equal/better pain management versus original THC/CBD.
 - 38% THC/CBD, 33% THC, 17% CBD: Not statistically different.

Context:

- RCT 120 Dravet syndrome pediatric patients: CBD reduced seizure frequency ~22% over placebo at 14 weeks.⁵
 - Adverse events include somnolence (Number Needed to Harm (NNH)=4), diarrhea (NNH=5), and appetite loss (NNH=5).
 - Recent RCT of lennox-gastaut (seizure) syndrome adults found similar.⁶
- Canadian guideline recommends cannabinoids only in refractory neuropathic pain, palliative cancer pain, chemotherapy-associated nausea/vomiting, and spasticity.⁷
- One guideline recommends low THC or high CBD:THC ratios to diminish THC adverse events.⁸
 - Largely based on small studies of healthy volunteers (some with other drug use history) examining MRI or short-term scale changes.

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