

Cannabinoids and Health

Module 8

Lecture 4: Is Cannabis Effective in Treatment of Cancer Symptoms?

Cannabis for Cancer: Physician Support

- Of nearly 1,500 physician readers of NEJM, 76% supported marijuana for medicinal purposes
 - Broken down by state/province, only one state (Utah) had less than 50% support
- Those in favor commented on responsibility to “alleviate suffering”
 - Many simultaneously acknowledged known dangers of prescription narcotics
- Those opposed commented on the lack of evidence, lack of provenance (legality), inconsistency in dosage, and side effects (e.g., psychosis)

CLINICAL DECISIONS
INTERACTIVE AT NEJM.ORG

Medicinal Use of Marijuana — Polling Results

Jonathan N. Adler, M.D., and James A. Colbert, M.D.

Cannabis as a Treatment for Cancer Symptoms

CURRENT
ONCOLOGY
A Canadian Cancer Research Journal

REVIEW ARTICLE

A user's guide to cannabinoid therapies in oncology

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- Notably, comments/results from the NEJM poll indicated particular support for cancer, including advanced symptoms and treatment-related side effects.
- Chemotherapy is effective for treating cancer but is cytotoxic and produces nasty side effects
- Side effects that may be mitigated by cannabis
 - Nausea and vomiting
 - Weight loss
 - Neuropathic Pain in Extremities

Cancer causes suffering on many levels

- What happens after you are diagnosed with cancer?
 - Tremendous anxiety and stress
 - Anxiety and stress can lead to lack of sleep
 - Lack of sleep makes everything worse
 - Often, patients find themselves meeting with a surgeon and scheduling surgery
 - Surgery involves post operative pain (and the need for a post-operative pain plan)
 - Post-operative pain can lead to chronic pain
 - Chemotherapy is often part of treatment and produces nasty side effects (pain, nausea vomiting, weight loss, lack of sleep, anxiety)
 - Is it hard to understand why many patients turn to cannabis?
 - But what do the studies suggest?

Cannabis To Treat Cancer Symptoms

- Limited data
- Studies do not always measure all of the possible outcomes
- Studies have not assessed effect of route of administration, formulation, different ratios of cannabinoids

Cannabis for Cancer Treatment Side Effects

- Whiting et al (2015) reviewed 28 trials involving cannabinoid treatments
 - Cannabinoids more reliably resulted in a complete response (OR = 3.82)
 - All trials suggested greater benefit for cannabinoids than alternative treatments.
- Smith et al (2015) conducted a Cochrane review of 23 trials of cannabinoids
 - Summary: cannabinoids were highly effective and more efficacious than placebo
 - Summary: no evidence supports cannabinoids over current first-line medications
 - Cannabinoids are a useful adjunctive treatment
- “insufficient evidence to support or refute the conclusion that cannabinoids are an effective treatment for cancer-associated anorexia-cachexia syndrome and anorexia nervosa”
 - In other words, not compelling evidence that cannabinoids can be used to treat cancer associated weight loss



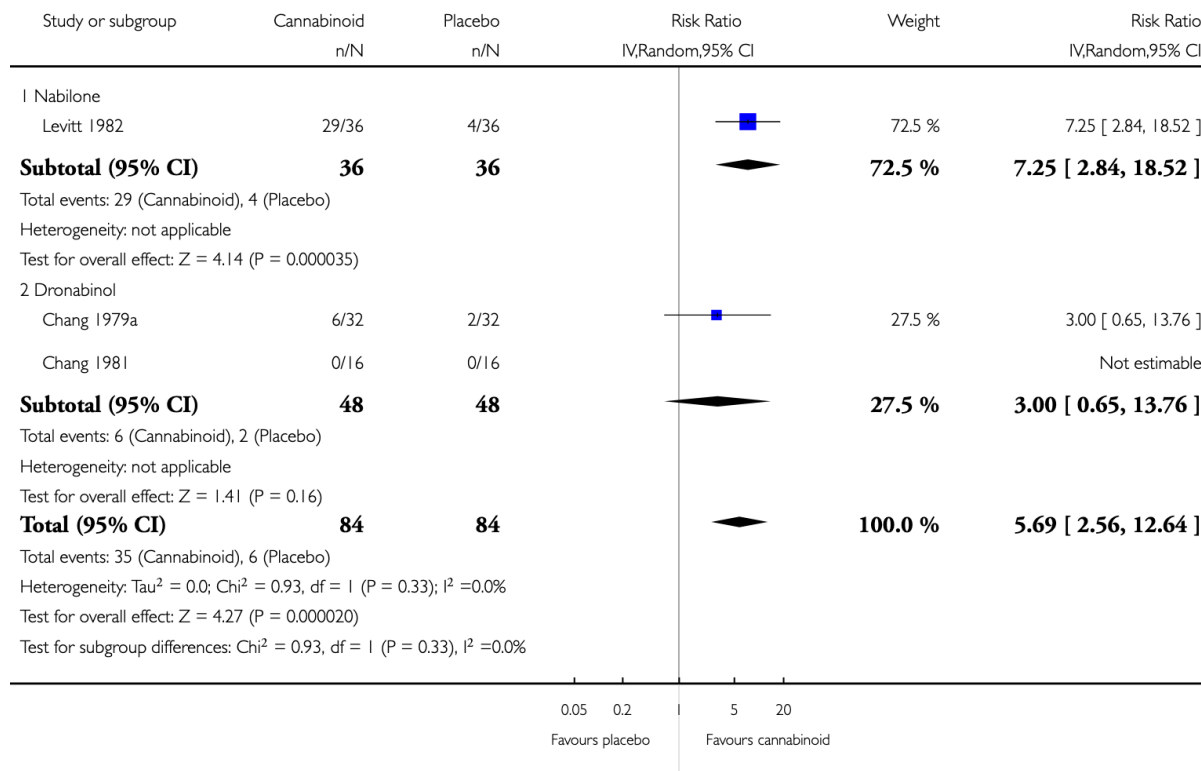
Cannabis for Cancer-Treatment Side Effects

Analysis 1.2. Comparison 1 Cannabinoid versus placebo, Outcome 2 Absence of vomiting.

Review: Cannabinoids for nausea and vomiting in adults with cancer receiving chemotherapy

Comparison: 1 Cannabinoid versus placebo

Outcome: 2 Absence of vomiting



Recent Study

- Followed more than 3000 cancer patients in Israel's medical cannabis program
- Only 8.3% reported that cannabis did not help them at follow-up

B. Symptom prevalence at intake and change at six months.

	Total (2970)	Change at six months		
		Symptom disappeared	Improvement	No change or deterioration
Sleep problems, No. (%)	2329 (78.4)	155 (16.7)	655 (70.8)	114 (12.3)
Weakness and fatigue, No. (%)	2160 (72.7)	84 (10.9)	429 (55.9)	255 (33.2)
Digestion problems, No. (%)	1918 (64.6)	199 (26.7)	375 (50.3)	171 (23.0)
Anxiety and depression, No. (%)	1694 (57.0)	62 (10.1)	455 (74.1)	97 (15.8)
Nausea and vomiting, No. (%)	1662 (56.0)	251 (36.3)	378 (54.7)	62 (9.0)
Lack of appetite, No. (%)	1453 (48.9)	130 (25.8)	313 (62.1)	61 (12.1)

Schleider et al., 2018, *European Journal of Internal Medicine*

Conclusions

- Many reasons why cancer patients use cannabis
 - Anxiety
 - Pain
 - Sleep
 - To combat side effects of chemo and radiation
 - As part of post-operative pain plan
- Data suggest that cannabis is effective with many of these cancer-related symptoms as noted in previous modules
- More research is needed, particularly on the best ratio of THC to CBD
- Very little research on CBD only, may be best to start with a combination CBD and THC
 - No risks and possible benefits to a higher ratio of CBD to THC (e.g. 2:1, 4:1, 8:1)
 - Patients should always start with low doses of THC to avoid harm (e.g., 2.5 mg)