

What do we know (or need to know) about suppository administration of cannabis products



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Why would a patient/doctor opt for rectal/vaginal administration of a medication

- Palatability issues
- Severe nausea or vomiting
- Irritable Bowel/Crohn's Disease
- Compromised esophageal or gastrointestinal tracts
- Unconscious (e.g. rectal diazepam for status epilepticus)
- Spasticity in MS
- Targeted relief for local pain
 - Hemorrhoids
 - Menstrual pain
 - Painful sex
 - Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS)
 - Pelvic pain
 - Sciatica



Mummy of Asru
Chantress of Amun
ca One Thousand BC

<http://www.thestudymcr.com/collections/pick/asru/>

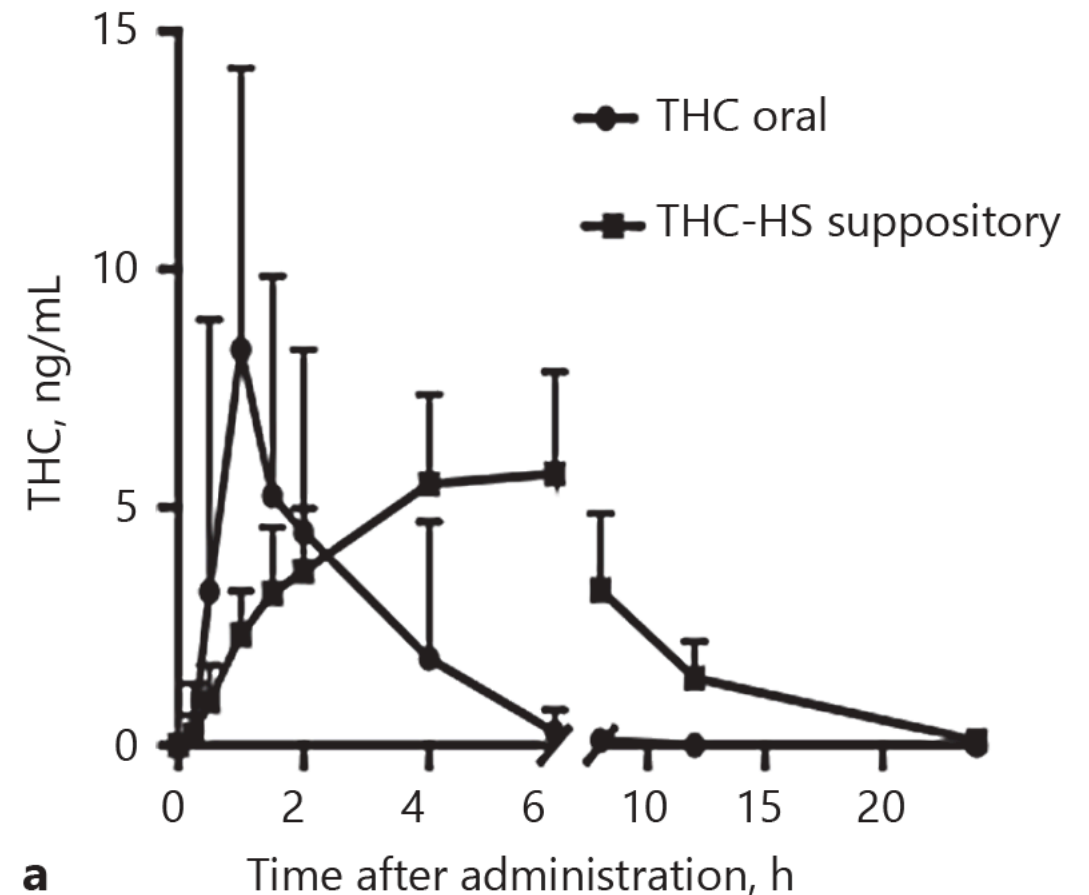


<https://www.greenrush.com/blog/cannabis-suppositories>

Pharmacokinetics of suppositories of cannabis products

Findings of THC-HS suppository vs oral delivery

- Slower rise in plasma THC
- Prolonged activity
- Avoids first pass metabolism
- Reduced psychoactive effect



Preclinical Science and Clinical Studies – Research Article

Med Cannabis Cannabinoids 2018;1:44–53
DOI: 10.1159/000489037

Received: April 9, 2018
Accepted: April 10, 2018
Published online: June 12, 2018

Medical Cannabis
and Cannabinoids

Pharmacokinetics and Tolerability of Δ^9 -THC-Hemisuccinate in a Suppository Formulation as an Alternative to Capsules for the Systemic Delivery of Δ^9 -THC

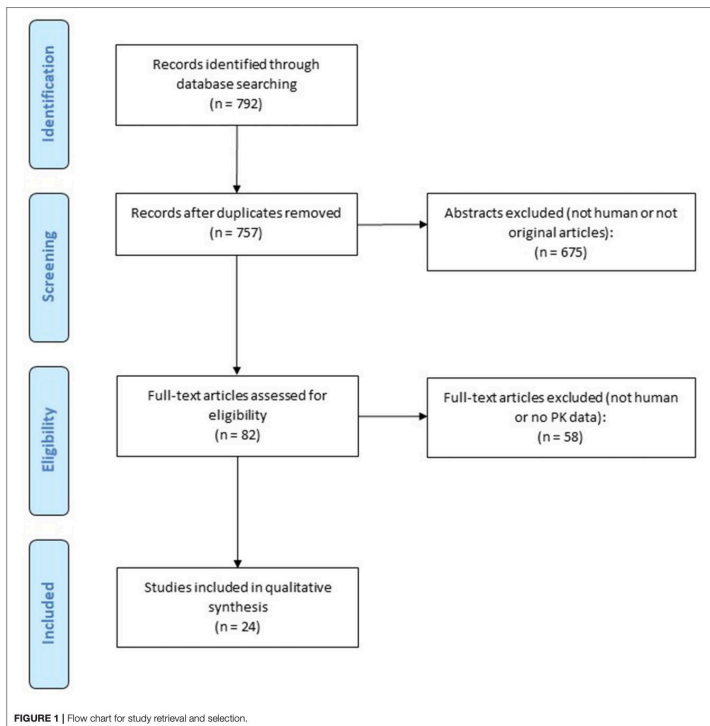
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A 2018 Systemic Review of Literature of CBD PK Found **No** Studies of Rectal/Vaginal Administration in Humans

Miller et al.

Pharmacokinetics of Cannabidiol in Humans



Take Home Points

- Oral bioavailability of CBD is quite low
 - Extensive 1st pass metabolism
- I.V., smoking/inhalation fastest route of administration
- Distinct lack of human (and animal) studies of bioavailability, safety, and efficacy of suppositories for CBD

A Systematic Review on the Pharmacokinetics of Cannabidiol in Humans

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A smattering of preclinical experiments suggest efficacy of rectal administration of CBD

Pharmacology

Contribution on Cannabinoids

Pharmacology 2012;89:149–155
DOI: [10.1159/000336871](https://doi.org/10.1159/000336871)

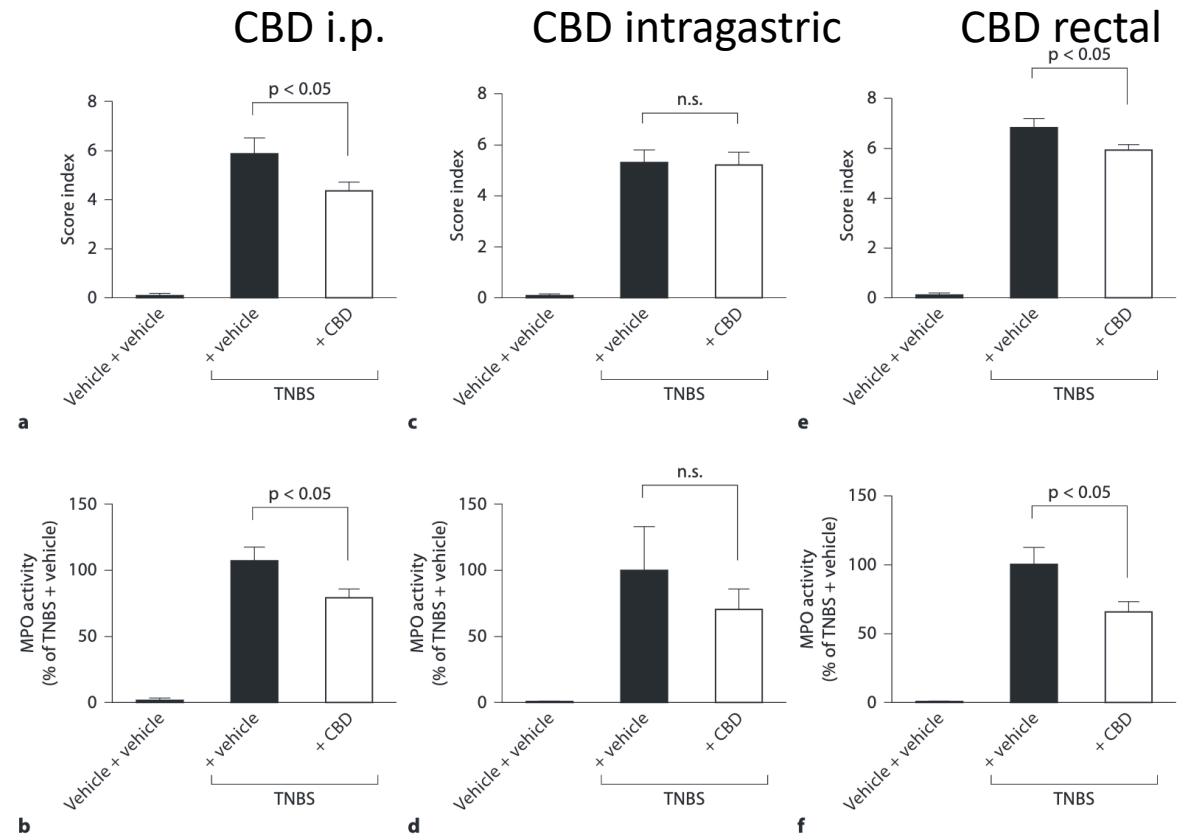
Received: January 13, 2012
Accepted: January 18, 2012
Published online: March 12, 2012

Topical and Systemic Cannabidiol Improves Trinitrobenzene Sulfonic Acid Colitis in Mice

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Despite the
lack of
human
studies....

The screenshot shows a Google Shopping search for "Suppository CBD". The search bar is at the top with the Google logo and search icons. Below the search bar are navigation options: All, Images, Maps, Shopping (selected), and More. There are also links for Home, Stores, Orders, and About Google Shopping. The location is set to Riverton, UT. On the left, there are filters for "Show only" (Available nearby, Buy on Google), "Price" (Up to \$15, \$15 - \$35, \$35 - \$60, Over \$60, with a price range input field), "Condition" (New items, Used items), and "Discover" (More products from smaller stores). The main results area is titled "Ads · See Suppository CBD" and displays six product listings:

- Magic Bullets Suppositories - Box of 100**: \$58.00, Sportaid.com
- Love Wellness: The Killer (Boric Acid Suppositories), 14...**: \$15.99, Love Wellness (2,920 reviews)
- Relief Suppositories | Foria**: \$50.00, Beauty Heroes (Special offer)
- Sanum Pleo Alb Suppositories 3X 10 Suppositories**: \$40.99, Natural Healthy C... (Free shipping)
- 2in1 Period Cramps Ozone Suppositories -...**: \$39.99, Amie Naturals (Free shipping)
- KeLATOX EDTA Chelation Suppositories...**: \$59.99, DR Vitamin Solutio... (Free shipping)

DIY CBD Suppository Recipe for Vaginal or Rectal Issues

1. Ingredients. 1/4 cup cocoa butter. 1/4 cup coconut oil. Cibadol **CBD** isolate or **CBD** tincture.

2. Equipment. 1 **suppository** mold. 1 dropper. 1 small saucepan.

3. Directions. Combine your coconut oil and cocoa butter in a small saucepan. Melt over medium heat and stir to combine.

Where to go from here?

- More research is necessary to determine safety, efficacy, tolerability of suppositories with CBD
 - Preclinical and clinical
 - None that I could find on clinicaltrials.gov
- What should the consumer know?
 - Distinct lack of data
 - Consumer beware
 - Anecdotal information is plentiful, scientific information is sparse
- Thoughts? Concerns?

