

Combining opioids and marijuana may be advantageous for pain sufferers

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Researchers report combining cannabinoids with morphine did not significantly increase impulsivity or memory impairment in a study conducted in rhesus monkeys. The findings suggest using opioids and marijuana together could offer a safe way to cut opioid dosage among patients suffering from pain and thereby reduce their risk of becoming addicted to opioids.

"These data provide additional evidence supporting the notion that [opioid](#)-cannabinoid mixtures that are effective for treating [pain](#) do not have greater, and in some cases have less, [adverse effects](#) compared with larger doses of each [drug](#) alone," said Vanessa Minervini, Ph.D., a postdoctoral fellow at the University of Texas Health Science Center at San Antonio.

Minervini will present the research at the American Society for Pharmacology and Experimental Therapeutics annual meeting during the [2019 Experimental Biology meeting](#), held April 6-9 in Orlando, Fla.

Previous studies have suggested the cannabinoids in marijuana enhance some of the pain-relieving effects of opioid drugs but do not enhance effects related to addiction and overdose. However, both drugs individually are known to slightly impair cognition, leading to a concern that such side effects could be amplified if opioids and marijuana are used together. Researchers say the new study offers encouraging evidence this is not the case.

The research comes amid a national opioid abuse crisis in which many addictions start with opioids prescribed for pain. At the same time, marijuana use is on the rise as more states legalize the drug for medical or recreational use.

"The current opioid epidemic underscores the need for safe and effective pharmacotherapies for treating pain," said Minervini.

"Combining opioid receptor agonists with drugs that relieve pain through actions at non-opioid mechanisms (for example, cannabinoid receptors) could be a useful strategy for reducing the dose of opioid needed to achieve [pain relief](#)."

The researchers gave several monkeys moderate doses of morphine and CP55940, a synthetic drug that mimics the activity of the tetrahydrocannabinol (THC) naturally found in marijuana. They assessed impulsivity and memory with tests involving touchscreens and treats. The results showed each drug impeded performance and that giving the monkeys both drugs together had a lower effect on performance than either drug alone.

While [clinical trials](#) would need to be conducted to confirm whether these results translate to humans, monkeys tend to process drugs similarly to humans and are considered a good model for cognition.

More information: Vanessa Minervini will present this research on Tuesday, April 9, from 9 a.m.-4 p.m. in Exhibit Hall-West Hall B, Orange County Convention Center ([abstract](#)).

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