New drug acts as marijuana in the brain

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A McGill University study suggests a new anti-depressant drug works by raising levels of endocannabinoids -- similar to a substance found in marijuana.

The study suggests the new drug, called URB597, might represent a safer alternative to use of marijuana for treatment of pain and depression, and open the door to new and improved treatments for clinical depression.

In pre-clinical laboratory tests researchers found URB597 increased the production of endocannabinoids by blocking their degradation, resulting in measurable antidepressant effects.

"This is the first time it has been shown a drug that increases endocannabinoids in the brain can improve your mood," said lead investigator Dr. Gabriella Gobbi, a researcher at Montreal and McGill Universities.

The researchers, including scientists from the University of California-Irvine, were able to measure serotonin and noradrenaline activity as a result of the increased endocannabinoids.

"The results were similar to the effect we might expect from the use of commonly prescribed antidepressants, which are effective on only around 30 percent of the population," said Gobbi. "Our discovery strengthens the case for URB597 as a safer, non-addictive, non-psychotropic alternative to cannabis for the treatment of pain and depression."