

Oxycodone may be more dangerous than other addictive pain medication

October 6 2014

While all prescription opioids can be abused, oxycodone may be more potent in its ability to promote changes in the brain relevant to addiction.

A new study in the *European Journal of Neuroscience* revealed greater increases of dopamine in the brain following the delivery of oxycodone compared with morphine. The release of dopamine, a [chemical messenger](#) between neurons, is consistently tied with reward and motivation.

The study's investigators say that it is essential to understand how drugs differentially alter [brain chemistry](#) if we hope to understand addiction and provide relief to addicts.

"Pain killer abuse is a very serious problem, and the opioid oxycodone (OxyContin) is the fastest growing drug of abuse in North America," said lead investigator, Caitlin Vander Weele. "We hope that our work will better inform both the public and [medical doctors](#) as they receive and prescribe treatments for pain."

More information: Vander Weele, C. M., Porter-Stransky, K. A., Mabrouk, O. S., Lovic, V., Singer, B. F., Kennedy, R. T. and Aragona, B. J. (2014), Rapid dopamine transmission within the nucleus accumbens: Dramatic difference between morphine and oxycodone delivery. *European Journal of Neuroscience*. [DOI: 10.1111/ejn.12709](https://doi.org/10.1111/ejn.12709)

Provided by Wiley

Citation: Oxycodone may be more dangerous than other addictive pain medication (2014, October 6) retrieved 23 April 2024 from <https://medicalxpress.com/news/2014-10-oxycodone-dangerous-addictive-pain-medication.html>

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