

## Protracted abstinence revisited

## February 1 2011

Opiate abuse is a chronic disorder and maintaining abstinence represents a major challenge for addicts.

Individuals recovering from opiate dependence have long reported that while the acute withdrawal symptoms from <u>opiates</u> may pass relatively quickly, they do not feel quite right for several weeks or even months thereafter. Called the "protracted abstinence syndrome," this cluster of vague depressive-like symptoms can include reduced concentration, low energy level, poor sleep quality, and anhedonia.

New data in animals, reported in <u>Biological Psychiatry</u>, now implicates the serotonin system in this phenomenon.

French researchers found that mice with chronic morphine exposure showed decreasing physical dependence during a period of abstinence, with no physical withdrawal symptoms after 4 weeks. In contrast, low sociability and despair behavior clearly developed after 4 weeks of abstinence.

Remarkably, treatment during the abstinence period with the antidepressant <u>fluoxetine</u> prevented the development of both social aversion and despair behavior.

This is important because fluoxetine targets the serotonin system, which is known to influence mood.

Senior author Dr. Brigitte Kieffer explained that this study "establishes a



direct link between <u>morphine</u> abstinence and depressive-like symptoms, and strongly suggests a causal effect of serotonin dysfunction in depressive features associated with abstinence."

"The greatest risk associated with protracted abstinence is relapse to drug use," comments Dr. John Krystal, Editor of *Biological Psychiatry*. "This study provides new insights into a process that may contribute to relapse."

These findings should foster novel research along serotonergic pathways in drug abuse. It is hoped that these findings can lead to real-world clinic use, since serotonergic medication is already broadly available.

**More information:** The article appears in *Biological Psychiatry*, Volume 69, Number 3 (February 1, 2011) <a href="www.sobp.org/journal">www.sobp.org/journal</a>

## Provided by Elsevier

Citation: Protracted abstinence revisited (2011, February 1) retrieved 6 May 2024 from <a href="https://medicalxpress.com/news/2011-02-protracted-abstinence-revisited.html">https://medicalxpress.com/news/2011-02-protracted-abstinence-revisited.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.