Treatment for amphetamine withdrawal (Cochrane Review)

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A substantive amendment to this systematic review was last made on 02 August 2001. Cochrane reviews are regularly checked and updated if necessary.

Background: Amphetamine withdrawal has been less studied although it is a common problem with a prevalent rate of 87% among amphetamine users. Its symptoms, in particular intense craving, may be a critical factor leading to relapse of amphetamine use. In clinical practice, treatment for cocaine withdrawal has been recommended for the management of amphetamine withdrawal although the pharmacodynamic and pharmacokinetic properties of these two substances are not the same.

Objectives: To search and determine risks, benefits, and costs of a variety of treatments for the management of amphetamine withdrawal.

Search strategy: Electronic searches of MEDLINE (1966 - December 2000), EMBASE (1980 - February 2001), CINAHL (1982 - January 2001) and Cochrane Controlled Trials Register (Cochrane Library 2000 issue 4) were undertaken. References to the articles obtained by any means were searched. The specialised register of trials of the Cochrane Group on Drugs and Alcohol was searched until February 2003.

Selection criteria: All relevant randomised controlled trials (RCTs) and controlled clinical trials (CCTs) were included. Participants were people with amphetamine withdrawal, diagnosed by any set of criteria. Any kinds of biological and psychological treatments both alone and combined were examined. A variety of outcomes, for example, number of treatment responders, score changes, were considered.

Data collection and analysis: Two reviewers evaluated and extracted the data independently. The dichotomous data were extracted on an intention-to-treat basis in which the dropouts were assigned as participants with the worst outcomes. The Relative Risk (RR) with the 95% confidence interval (95% CI) was used to assess the dichotomous data. The Weighted Mean Difference (WMD) with 95% CI was used to assess the continuous data.

Main results: The results of two studies have shown some benefits of amineptine in the treatment of amphetamine withdrawal. Those benefits can be seen in the respects of discontinuation rate and global state, as measured by Clinical Global Impression Scale. However, no direct benefit of amineptine on amphetamine withdrawal symptoms or craving was shown.

Reviewers' conclusions: The evidence about the treatment for amphetamine withdrawal is very limited. Amineptine has limited benefits on some amphetamine withdrawal symptoms. Due to a number of reports of amineptine

abuse, it has been withdrawn from the market for a few years. At present, no available treatment has been demonstrated to be effective in the treatment of amphetamine withdrawal. The medications that should be considered for further treatment studies may be those with the propensities to increase dopamine, norepinephrine and/or serotonin acitivities of the brain. Naturalistic studies of amphetamine withdrawal symptoms and course are also crucial for the development of study designs appropriate for further treatment studies of amphetamine withdrawal.

Citation: Srisurapanont M, Jarusuraisin N, Kittirattanapaiboon P. Treatment for amphetamine withdrawal (Cochrane Methodology Review). In: *The Cochrane Library*, Issue 4, 2003. Chichester, UK: John Wiley & Sons, Ltd.

This is an abstract of a regularly updated, systematic review prepared and maintained by the Cochrane Collaboration. The full text of the review is available in *The Cochrane Library* (ISSN 1464-780X).

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