

MEDLINE Abstract

Alpha2-adrenergic agonists for the management of opioid withdrawal.

Cochrane Database Syst Rev. 2009; (2):CD002024 (ISSN: 1469-493X)

Gowing L ; Farrell M ; Ali R ; White JM

Discipline of Pharmacology, University of Adelaide, Frome Road, Adelaide, South Australia, Australia, 5005.

linda.gowing@adelaide.edu.au

BACKGROUND: Withdrawal is a necessary step prior to drug-free treatment or as the end point of long-term substitution treatment. **OBJECTIVES:** To assess the effectiveness of interventions involving the use of alpha2-adrenergic agonists to manage opioid withdrawal. **SEARCH STRATEGY:** We searched the Cochrane Central Register of Controlled Trials (The Cochrane Library Issue 3, 2008), MEDLINE (January 1966-July 2008), EMBASE (January 1985-2008 Week 31), PsycINFO (1967 to 7 August 2008) and reference lists of articles. We also contacted manufacturers in the field. **SELECTION CRITERIA:** Controlled trials comparing alpha2-adrenergic agonists with reducing doses of methadone, symptomatic medications or placebo, or comparing different alpha2-adrenergic agonists to modify the signs and symptoms of withdrawal in participants who were opioid dependent. **DATA COLLECTION AND ANALYSIS:** One author assessed studies for inclusion and undertook data extraction. Inclusion decisions and the overall process were confirmed by consultation between all authors. **MAIN RESULTS:** Twenty-four studies, involving 1631 participants, were included. Twenty-one were randomised controlled trials. Thirteen studies compared a treatment regime based on an alpha2-adrenergic agonist with one based on reducing doses of methadone. Diversity in study design, assessment and reporting of outcomes limited the extent of quantitative analysis. Alpha2-adrenergic agonists are more effective than placebo in ameliorating withdrawal, and despite higher rates of adverse effects, are associated with significantly higher rates of completion of treatment. For the comparison of alpha2-adrenergic agonist regimes with reducing doses of methadone, there were insufficient data for statistical analysis, but withdrawal intensity appears similar to or marginally greater with alpha2-adrenergic agonists, while signs and symptoms of withdrawal occur and resolve earlier. Participants stay in treatment longer with methadone. No significant difference was detected in rates of completion of withdrawal with adrenergic agonists compared to reducing doses of methadone, or clonidine compared to lofexidine. Clonidine is associated with more adverse effects than reducing doses of methadone. Lofexidine does not reduce blood pressure to the same extent as clonidine, but is otherwise similar to clonidine. **AUTHORS' CONCLUSIONS:** Clonidine and lofexidine are more effective than placebo for the management of withdrawal from heroin or methadone. No significant difference in efficacy was detected for treatment regimes based on clonidine or lofexidine, and those based on reducing doses of methadone over a period of around 10 days but methadone is associated with fewer adverse effects than clonidine, and lofexidine has a better safety profile than clonidine.

PreMedline Identifier:19370574

From MEDLINE®/PubMed®, a database of the U.S. National Library of Medicine.