A double-blind, placebo-controlled trial of dextromethorphan combined with clonidine in the treatment of heroin withdrawal.

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Abstract
Dextromethorphan has been reported to ameliorate opioid withdrawal symptoms in both animal and human subjects. In the present study, we investigated the efficacy of dextromethorphan as an add-on medication in heroin detoxification treatment in a double-blind, placebo-controlled design. Sixty-five heroin-dependent patients (male, 63; female, 2) participated in this inpatient detoxification trial after giving informed consent. Clonidine 0.075 mg 4 times a day was given as an anti withdrawal medication at baseline. Each patient was then randomly assigned to treatment with either dextromethorphan 60 mg or placebo 4 times a day as additional medication. Flurazepam 30 mg was given before bedtime for insomnia. Other medications that were allowed included loperamide for diarrhea and lorazepam for agitation. Participants were monitored using the Objective Opioid Withdrawal Scale 3 times a day as the primary outcome to compare drug efficacy between groups. Generalized estimating equation model analysis revealed that the Objective Opioid Withdrawal Scale had no group difference between dextromethorphan and placebo group overall (P = 0.29), whereas a significant difference between groups was found during day 3 to day 6 (P = 0.04) by post hoc analysis. There was no difference in the Clinical Global Impression Scale, patient's impression of treatment, and use of ancillary medications between groups. No severe adverse effects were noticed. We suggest that dextromethorphan has some beneficial effect in attenuating the severity of opioid withdrawal symptoms and can be used as an adjunction medication in the treatment of opioid withdrawal, whereas the exact efficacy needs further investigation.

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