

Heroin Detoxification

To the Editor: Dr Collins and colleagues¹ studied anesthesia-assisted vs buprenorphine- or clonidine-assisted heroin detoxification and naltrexone induction. The article and the accompanying editorial by Dr O'Connor² showed that detoxification is not in itself a treatment for dependence.

Clinicians have developed various accelerated methods of opioid detoxification to avoid the discomfort of withdrawal. Anesthesia-assisted detoxification has recently received considerable public and media attention. The debate on efficacy has been blurred by intensive marketing techniques used to commercialize the method, including submitting the term as a registered trademark.³ Randomized controlled clinical trials can help to resolve the controversies, and the study by Collins et al and that of McGregor et al⁴ are important steps toward this goal.

The results of a randomized controlled clinical trial that we conducted⁵ also support the ineffectiveness of anesthesia-assisted detoxification compared with clonidine detoxification. We randomly assigned 70 opiate-dependent patients to undergo either anesthesia-assisted or clonidine-assisted opioid detoxification. Differences in the self-reported abstinence rate between the groups were not statistically significant at 3, 6, and 12 months. There was a slight nonsignificant advantage for anesthesia at 3 months because of greater rates of naltrexone induction in that group. The overall failure rate in both groups was more than 80% at 6 months and 90% at 1 year. Naltrexone was associated with poor adherence as in the study by Collins et al. After 3 randomized controlled trials, there is convincing evidence that this procedure is not effective.

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To the Editor: The study by Dr Collins and colleagues¹ will surely be of interest to hospitals and other clinical facilities that are considering the introduction of either ultrarapid opiate detoxification (using general anesthesia along with an opioid antagonist, such as intravenous naloxone) or rapid opiate detoxification (using other means of sedation along with an opioid antagonist, such as oral naltrexone). The results were mixed, as expected in a study addressing management of patients with heroin addiction, one of the most intractable problems in addiction medicine.

However, given the small sample size, we still do not have adequate data to advise patients about the extent to which rapid treatment that does not use anesthesia is safer than ultrarapid treatment that uses general anesthesia; nor do we know whether the incorporation of opioid antagonists (naloxone or naltrexone) is responsible for differences in clinical outcome. Moreover, examining detoxification approaches alone does not establish the best approach to use for the treatment of the chronic disease of opioid addiction. Detoxification is only management of the transient condition of acute withdrawal and is a prelude to the necessary long-term task of managing a patient's opioid addiction.²

With the increase in unauthorized use of prescription opioids,^{3,4} clinicians in the past decade have confronted a bimodal cohort of patients with a dependency on opioids: those addicted to heroin and those addicted to pharmaceuticals.⁵ Although the study by Collins et al addressed only those with heroin addiction, much remains to be elucidated by well-designed studies addressing the needs of both of these cohorts of opioid addicts.

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In Reply: The study by Dr Favrat and colleagues¹ comparing anesthesia-assisted rapid opioid detoxification with a clonidine-based inpatient alternative had results similar to ours. As Drs Favrat and Besson noted, 3 randomized clinical trials have now failed to find evidence to support long-term efficacy for the anesthesia-assisted procedure, and none has demonstrated evidence supporting its use. In our study, the positive control procedure, buprenorphine-assisted rapid opioid detoxification, was comparable with the anesthesia procedure on all important positive outcome measures (withdrawal scores, rates of naltrexone induction, and treatment retention) while being much safer and far less expensive.

We agree with Dr Miller that the results of our study, as well as those of McGregor et al² and Favrat et al,¹ should be very carefully considered by clinics and hospitals that might offer the anesthesia procedure, as well as by patients considering it. Miller highlights the high relapse rates in all 3 groups, which we acknowledge, but we disagree with his assertion that heroin addiction is one of the most intractable problems in addiction medicine. Although heroin dependence is clinically challenging, it may be successfully treated, particularly when agonist maintenance treatments are used. As Dr O'Connor points out in his editorial,³ opioid agonist maintenance treatments using methadone or buprenorphine have consistently demonstrated better results than detoxification.^{4,5}

Miller also asserts that, given the small sample size, it is not clear whether rapid detoxification techniques (eg, buprenorphine-assisted as in our study) are safer than ultrarapid ones that use general anesthesia. As we noted in our article, deaths have been associated with the anesthesia-assisted procedure; however, we know of none associated with other rapid detoxification techniques. He suggests that the incorporation of opioid antagonists might be responsible for differences in outcome, but both the buprenorphine-assisted and anesthesia-assisted procedures included naltrexone induction. We agree that detoxification is often only the first step in the treatment of the chronic illness of addiction.

Finally, we agree with Miller that there may be important differences in the course of illness for individuals dependent on prescription opioids compared with those dependent on heroin. Although we would expect the pharmacology of most prescription opioids (which are in-

herently short-acting) to govern the course of withdrawal severity, the course of illness may be affected more by the duration of the addiction, decreased need to engage in street crime to support a habit, and increased resources to afford treatment. Nevertheless, we too would welcome well-designed studies to address the needs of individuals dependent on prescription opioids.

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Detoxification and Treating Opioid Dependence

To the Editor: I am concerned about the use of the concept and term "dependence" in the Editorial regarding methods of detoxification by Dr O'Connor.¹ In the context of the discussion related to the article by Dr Collins and colleagues,² this use is misleading and is one of the reasons the medical community at large, along with patients, continue to have misconceptions that perpetuate a barrier to rational and effective pain management.

Physical dependence and addiction are not equal; they are clearly distinct entities according to *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* criteria.³ O'Connor refers to opioid dependence in the same context as opioid addiction. Although chronic opioid therapy will inevitably involve some degree of opioid physical dependence, it will not necessarily lead to addiction. Tolerance and physical dependence are pharmacological properties of a drug and are not synonymous with addiction. For several years, both the addiction medicine and pain medicine communities have attempted to clarify the distinction between these concepts and their nomenclature.⁴

O'Connor states that dependence is characterized by physical dependence, which he correctly notes is "evi-