

Buprenorphine May Help Those Addicted to Heroin and Cocaine

A recently published study shows that buprenorphine, an effective and well-tolerated office-based treatment for opiate addiction, may significantly reduce abuse of heroin and cocaine in people addicted to both drugs.

In the study, conducted at NIDA's Intramural Research Program in Baltimore, scientists tested different doses of liquid buprenorphine in 200 men and women addicted to heroin and cocaine. The researchers found that the highest dose of buprenorphine—16 mg daily—was well tolerated and effective in reducing use of both drugs.

The chief outcome measures were urine concentrations of cocaine and heroin metabolites. Participants who received higher doses of buprenorphine had statistically significant decreases in the cocaine metabolite benzoylecgonine (BZE) or in urine morphine. For those who received 16 mg of buprenorphine daily, mean BZE concentrations fell by almost 95 percent, and mean morphine concentrations fell by 92 percent. For those who received 8 mg of buprenorphine daily, mean BZE concentrations fell by 90 percent and mean morphine concentrations fell by 83 percent.

Qualitative findings showed that, for participants who received 16 mg of buprenorphine daily, the number who tested positive for cocaine fell by nearly 53 percent and the number who tested positive for heroin fell by almost 43 percent by the end of the study. For those who received 8 mg of buprenorphine daily, the number who tested positive for cocaine fell by nearly 22 percent and the number who tested positive for heroin fell by almost 30 percent.

Participants also received weekly individual drug abuse counseling during the randomized, double-blind, 13-week study in which they received different regimens of active medication.

The scientists say further studies are needed to clarify the optimal dose of buprenorphine for treatment of individuals addicted to both cocaine and heroin, and to identify variables that will allow physicians to select patients who have the greatest chance of benefiting from this therapy.

WHAT IT MEANS: Previous research has pointed to buprenorphine's usefulness as an office-based treatment for the more than 1 million Americans addicted to opiates. According to the study's lead author, up to 75 percent of patients in methadone treatment programs for heroin addiction also abuse cocaine. This study potentially expands the drug's clinical applications to this large proportion of dually addicted people. Dr. Iván D. Montoya, of NIDA's Division of Treatment Research and Development, and his colleagues published the study in the January 2004 issue of *Clinical Pharmacology and Therapeutics*.