

BODY

THE CURE:

Researchers say a nonaddictive painkiller stops cravings for cocaine and heroin

Substance abuse researchers are buzzing with news of a wonder drug they say could provide a major breakthrough in the treatment of opiate addiction. Preliminary reports indicate that the drug—called buprenorphine and originally patented as an analgesic—may also work for the growing number of cocaine abusers for whom there are currently few—if any—effective therapies. “Of the thirty or so drugs the government is investigating for the treatment of addiction, buprenorphine is one of the most promising,” reports Marvin Snyder, director of the division of preclinical research at the National Institute on Drug Abuse (NIDA) in Rockville, Maryland.

Buprenorphine is chemically similar to opiates like heroin, morphine, and methadone—a habit-forming drug dispensed orally in outpatient programs to block the effects of other narcotics—but drastically different in effect.

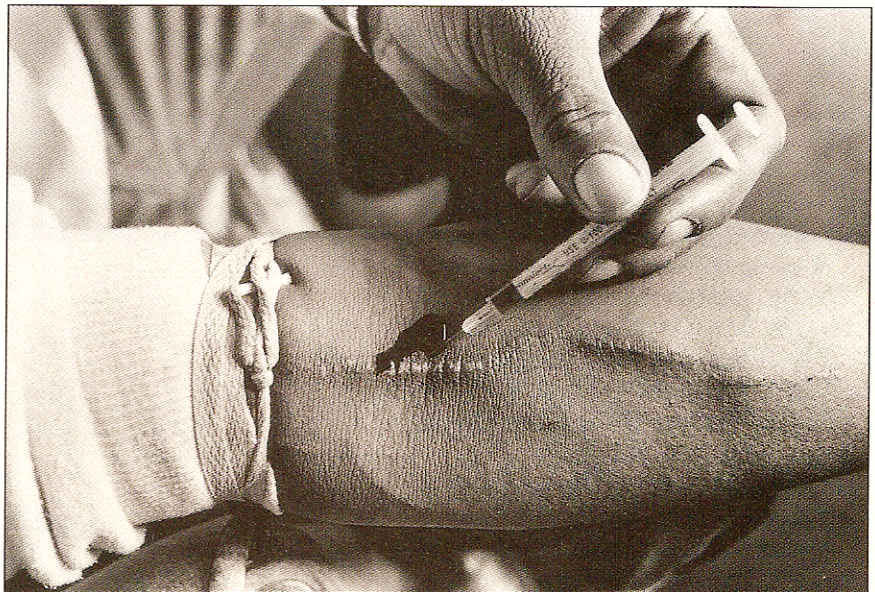
When heroin users switch to buprenorphine, they report a sense of calm and energy rather than the euphoric stupor other opiates induce. Even better, termination of the drug after prolonged use results only in mild irritability for a few days—tame symptoms compared to the insomnia and violent cramps that compound heroin withdrawal. Concluding that buprenorphine has minimal potential for abuse, the Drug Enforcement Agency gave it a Schedule 5 rating—compared with Schedule 4 for valium, Schedule 2 for methadone, and Schedule 1 for heroin. “It’s almost impossible to overdose on it,” says Dr. Jack Men-

delson, director of the Alcohol and Drug Abuse Research Center at McLean Hospital in Boston and Harvard Medical School professor of psychiatry and neuroscience. While research on heroin addicts continues, studies of buprenorphine’s effects on cocaine dependency are stealing center stage. In an experiment conducted last year, Mendelson and his colleagues trained five rhesus monkeys to self-administer cocaine through an intravenous catheter. After six months of daily doses

of which have an immunosuppressive effect. Mendelson says this group may be even more susceptible to infection with HIV, the virus associated with AIDS, from contaminated needles than those who inject just one drug. “That’s why we’re targeting them for treatment with buprenorphine,” he says. “If it proves safe and effective in their case, we’ll consider giving it to individuals addicted to cocaine alone.”

More studies will be required, however, before the Food and

Getting off the high horse: Heroin addicts treated with buprenorphine have no problem staying straight; early reports on cocaine abusers are equally promising.



equivalent to human cocaine abusers’ average intake, the animals became dependent on the drug. Then the researchers started giving them daily injections of buprenorphine. Four of the monkeys cut their cocaine intake in half immediately. After one month of treatment, all five of the monkeys stopped taking cocaine.

Mendelson’s team is now spearheading clinical trials of oral buprenorphine on 600 people dually addicted to heroin and cocaine. An estimated half million Americans regularly inject speedballs, a mixture of the two drugs, both

Drug Administration approves buprenorphine for purposes other than pain control. Reckitt and Coleman, the British company that introduced the drug, has so far been reluctant to see it associated with heroin addiction for fear it will lose its mainstream market. But the company’s patent expired recently, and NIDA is negotiating with it to obtain proprietary animal research data. If all goes well on the commercial and research fronts, buprenorphine could soon become the first line of assault for addiction.

—Kathleen McAuliffe 