

# **The Chronicle**

A Paterson Counseling Center Newsletter

## Special points of interest:

- PCC Approaches 2nd year of CARF Accreditation
- Quality assurance team is focused on ongoing improvements in service to clients
- PCC website receives 2000 hits a month on average
- PCC provides services via the mobile van and participates in needle exchange program.

#### Inside this issue:

Cocaine Vaccine 1
Vaccine Continued 1

Vaccine 2

## **Cocaine Addiction Vaccine**

A vaccine to help cocaine addicts beat their habit is showing some effect but is far from a cure, researchers report. Slightly more than one-third of participants in a new study developed desired immune system antibodies to the illicit drug and, in this group, cocaine use did go down. But the effects were only sustained for two months, the researchers found.

Experts were heartened by the finding but still circumspect in predicting how they might benefit active addicts.

"The results are promising, to be sure, but still the majority of participants did not respond," said Jeffrey T. Parsons, professor and chair of psychology at Hunter College in New York City. "It's also important to point out that all participants were also on methadone maintenance and cognitive behavioral therapy, so the best possible role this vaccine could play in the future of the treatment of cocaine addiction is as a part of a series of intervention efforts. The vaccine by itself is not likely to have strong effects, unless coupled with other forms of treatment."

"It's not the cure or the treatment but it's a good way to go," added Jean Bidlack, professor of pharmacology and physiology at the University of Rochester Medical Center. And several major shortcomings still need to be worked out, such as the role of booster shots to keep up needed level of antibodies, pointed out Dr. Steven Prenzlauer, assistant professor of psychiatry and behavioral science at



Vaccine Continued

Texas A&M Health Science Center College of Medicine, Round Rock, and director of psychiatry and behavioral health at Lone Star Circle of Care.

Still, Dr. Nora Volkow, director of the U.S. National Institute on Drug Abuse, said during an afternoon press conference: "These findings are transformative in their ability to show for the first time positive results in cocaine addiction. This may be a promising approach as a strategy to address other types of drug addiction. This opens up a series of new opportunities."

Dr. Thomas Kosten, professor of psychiatry and neuroscience at Baylor College of Medicine,



added at the news conference: "The participants in some cases were taking up to 10 times the usual dose but weren't getting a high from it and eventually ran out of money."

According to background information in the study, which appears in the October issue of the *Archives* of *General Psychiatry*, 2.5 million people in the United States are currently addicted to cocaine, yet only 809,000 of them are getting treatment. This type of addiction accounts for a full third of visits to emergency departments.

There are currently no approved drug therapies for cocaine addiction, although a variety of behavioral therapies are used.

Unlike methadone -- another opiate sometimes referred to as "medical heroin" -- the new vaccine actually affixes itself to cocaine, thereby rendering the drug useless, Bidlack explained.

The relatively short (six-month) trial was led by Dr. Bridget A. Martell, of Yale University School of Medicine, New Haven, and Veterans Affairs Connecticut Healthcare System, West Haven. The study involved 94 adults, mostly white men, who were users of crack cocaine and who were in methadone maintenance programs for opioid addiction.

Participants were randomly assigned to receive five shots, either a placebo or the actual vaccine. Thirty-eight percent of participants achieved the desired level of antibodies or higher. This group also had more "clean" urine samples than those

### Vaccine Continued

with lower antibody levels and those in the placebo group (45 percent versus 35 percent).

Higher levels were first seen at week eight and then dropped off precipitously between weeks 16 and 24, the researchers found. Side effects were mainly restricted to tenderness around the injection site. There is some difficulty translating these findings into a "real-world" setting, experts said.

"These cocaine users were also methadone-maintained and opiate-dependent, representing a small subgroup of those addicted to cocaine," Parsons noted. "From this study, we have no idea whether or not this vaccine will be effective in those whose primary, or even sole addiction, is to cocaine."

And the participants were already in a methadone-maintenance program, giving them more incentive to stay in the trial, Prenzlauer said.

The study was sponsored by the U.S. National Institute on Drug Abuse and the Veterans Affairs Mental Illness Research, Education and Clinical Center. Martell is also a medical director at drug company Pfizer.

## More information

There's more on cocaine and other substance abuse at the U.S. National Institute on Drug Abuse.

This article: Copyright © 2009 ScoutNews,