A team of researchers at the University of Pennsylvania tested the effects of topiramate on a group of individuals struggling with both cocaine and alcohol addiction.

Topiramate is a drug that has typically been used to treat epilepsy, and most recently, weight loss. A new study conducted by the University of Pennsylvania School of Medicine tested topiramate's effect on individuals who struggle with both cocaine and alcohol addiction, finding that it could potentially help reduce cravings and sustain abstinence.

Past studies have shown that topiramate could be used to curb cocaine as well as alcohol dependency, but this is the first time it's been used to treat people who struggle with both cocaine and alcohol addictions at the same time. Because cocaine and alcohol addiction frequently comes hand in hand, in conjunction with cognitive behavioral therapy, treatments "targeting both may be the best strategy to treat individuals," the study states.

Topiramate, which has mostly been used to treat epilepsy in the past, is an anticonvulsant drug that increases gamma-Aminobutyric acid (GABA) in the brain. GABA is a primary inhibitory neurotransmitter in the central nervous system.

Topiramate is FDA approved to treat epilepsy, migraines, and most recently, weight loss. According to Brazilian researchers who studied topiramate's effects on obese patients, those who took the drug for 4 months lost an average of 11.8 pounds more than those who took placebo pills.

However, the study also showed that toprimate's side effects, which include paresthesia (burning sensation around the mouth), impaired taste, slower thinking and difficulty concentrating caused the patients to be more likely to stop taking the drug.

In the UPenn study, topiramate was tested on 170 cocaine and alcohol dependent individuals during a 13-week clinical trial. It produced mixed results. Though topiramate reduced alcohol cravings, it did not reduce alcohol consumption itself. And though it did not reduce cocaine cravings, it helped individuals stay in treatment longer than those on placebo - 20 percent of topiramate users abstained from cocaine during the last three weeks, compared to the 7 percent on placebo. It appears that people suffering from the most severe cocaine withdrawal were the ones most likely to benefit from the drug.

"Drug counseling remains the treatment of choice, but many patients do not respond completely to it, so developing effective medications for treatment is a research priority," said Dr. Kyle Kampman, professor of Psychiatry at the Perelman School of Medicine at the University of Pennsylvania and an author of the study.

Future tests plan to combine topiramate with other drugs in order to develop the most effective form of medication for cocaine and alcohol addiction.

Source: Medical Daily, By Lecia Bushak