Her craving to puff goes poof!

Smoking-cessation drug works wonders, but only for women

By Judy Peres
Tribune staff reporter

Why would a pleasure-blocking drug help women - but not men - quit smoking?

That's one of the questions researchers at the University of Chicago are trying to answer in an ongoing clinical trial that will be enrolling more than 300 smokers over the next two years. A preliminary study, reported in this month's issue of the journal Nicotine and Tobacco Research, found that adding the drug naltrexone to a conventional smoking-cessation program boosted the success rate for women by almost 50 percent but made no difference for men.

Scientists suspect the drug inhibits the chemical signals in the brain that convey pleasure when people use nicotine. When the immediate rewards of smoking are blocked, people report reduced craving for cigarettes.

In the preliminary study, all 110 participants received behavioral therapy and nicotine patches, the standard treatment for nicotine-dependent smokers. On top of that, half were randomly assigned 50 milligrams per day of naltrexone while the other half took dummy pills. Neither the patients nor the researchers knew who received the real thing.

"We know only a minority quit with the standard treatment," said psychologist Andrea King, director of the Clinical Addictions Research Laboratory. "We wanted to see if being on naltrexone for two months would help."

When they looked at the results for the group as a whole, King's team found that the quit rate was slightly higher for smokers who got the drug, but the difference was not statistically significant.

"Then we broke down the data by sex, and the results were striking," she said. Men did just as well with or without naltrexone: About two-thirds stopped smoking. "But for women, when they didn't get the study drug, the quit rate was much lower;" King said. "After two months, 58 percent of the women were successful with naltrexone but only 39 percent were able to quit without it."

In addition, King said, "women on naltrexone had less craving for cigarettes and fewer withdrawal symptoms."

So her team has launched a bigger, longer trial to see if they can confirm and explain the earlier results.

One thing they'll be looking at is weight gain. Men and women quitters gained less when they took naltrexone (1 pound versus 4 pounds, on average). One possible explanation, King said, is that "women have less tolerance for weight gain" - meaning they light up when they find their pants are too tight.

In addition to weight and appetite, the researchers are monitoring withdrawal symptoms, such as sadness and irritability. They use breath tests, which measure carbon monoxide levels, to verify if the subjects are truly smoke-free.

For more information about the ongoing trial go to clinicaltrials.gov/show/NCT00271024 or the soon to be available stopsmoking.uchicago.edu, or call 773-834-8654.