one group adhered, the less likely they were to drink heavily by the end of the first month.

This association was not seen in the placebo group.

Generally side effects were reported more often in the naltrexone group than in the placebo group, but not among the heavy drinkers.

The one exception was that nausea was reported more often among the naltrexone patients in the heavy-drinking group.

It is possible that naltrexone-related nausea may be involved in the reduction in heavy drinking, but the current study design did not allow for distinguishing between nonspecific nausea and nausea related to drinking alcohol, the investigators commented.

Levels of the liver enzymes aspartate aminotransferase (AST) and alanine transaminase (ALT) did not differ between the naltrexone and placebo group at baseline or at 1 month of treatment, nor did the percentage of individuals with levels out of the normal range: 3.6% of the naltrexone group and 2.7% of the placebo group were outside the normal range for AST at week 2, as were 10.7% and 18.9%, respectively, for ALT. "These findings support the hepatic safety of naltrexone in people with nicotine dependence and may be reassuring to treatment providers concerned about potential liver toxicity with naltrexone," Dr. King and her associates said.

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The authors reported having no conflicts of interest. ■

Alcohol Abuse May Lead to Depression

BY MARY ANN MOON

Alcohol abuse and dependence appear to lead to major depression, rather than vice versa, according to a collection of statistical analyses reported in the Archives of General Psychiatry.

Researchers used data from the ChristChurch Health and Development Study, a cohort of 635 boys and 630 girls born in urban New Zealand in 1977 and followed through age 25, to examine the well-known relationship between alcohol abuse or dependence and depression. They used several advanced statistical modeling methods to explore possible causal pathways between the two disorders, said David M. Fergusson, Ph.D., and his associates at the University of Otago, Christchurch.

Subjects who abused alcohol were nearly twice as likely to fulfill criteria for major depression as were those who did not abuse alcohol, the statistical analyses showed.

At age 24-25 years, approximately 14% of the sample met DSM-IV criteria for alcohol dependence (6%) or abuse (8%), and 14% met criteria for major depression.

At all ages, there were clear and significant trends for alcohol abuse to be associated with depression, such that subjects who abused alcohol were nearly twice as likely to fulfill criteria for major depression as were those who did not abuse alcohol. In contrast, major depression did not appear to predispose subjects to alcohol abuse.

In addition, the relationship between alcohol abuse and depression was not found to arise from some common factor underlying both disorders, Dr. Fergusson and his colleagues said (Arch. Gen. Psych. 2009;66:260-6).

It is possible that the use of alcohol may trigger a response in genetically susceptible individuals that raises the risk of depression. Other research also suggests that alcohol's action as a depressant may lead to periods of depressed affect among drinkers, the investigators added.

The researchers noted that these results contradict those of previous studies, some of which have suggested that the causal relationship moves in the opposite direction because some people with depressive symptoms self-medicate with alcohol.

The current study might be more able to detect the true direction of the causal relationship because of its use of numerous complex statistical methods as well as its use of repeated structured mental health assessments over time, Dr. Fergusson and his associates said. ■