Active Intervention Needed for Some Drinkers

BY DOUG BRUNK

SAN DIEGO — Alcohol-dependent patients who were older than age 30 and met certain DSM-IV criteria for alcohol dependence, including tolerance and continuing to drink despite its negative impact on important events—had less dramatic reduction in heavy drinking over time.

The findings suggest that alcohol-dependent patients with those characteristics may benefit from more aggressive intervention efforts, according to results from an analysis of data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).

“There have been a number of studies that examined the predictors of change in heavy drinking status over time in the general population,” Khaled Sarsour, Ph.D., said in an interview after presenting the findings in a poster at the annual scientific conference of the Research Society on Alcoholism.

“However, to the best of our research team’s knowledge, this was the first study that examined the predictors of change in the number of heavy drinking days with- in a U.S. nationally representative population of alcohol-dependent patients.”

Dr. Sarsour, a research scientist in the epidemiology and health services research group at Eli Lilly & Co., and his associates examined predictors of the change in frequency of heavy drinking among 1,053 alcohol dependent patients from baseline (NESARC Wave 1, conducted in 2001-2002) to about 3 years later (NESARC Wave 2, conducted in 2004-2005). Frequency of heavy drinking was defined as the number of heavy drinking days (five drinks or more per day for men; four drinks or more per day for women) in the past year.

The researchers used an analysis of co- variance model, adjusting for baseline heavy drinking days, to examine factors associated with change in the frequency of heavy drinking. More than half of pa- tients (64%) were younger than age 39 years, 63% were male, 61% were white, and 37% were married.

Overall, the mean number of heavy drinking days among patients with alcohol dependence fell from 114 per year during NESARC Wave 1 to 84 per year during NESARC Wave 2.

Dr. Sarsour and his associates report- ed that the factors signifi- cantly associated with an increase in heavy drinking days be- tween the two time pe- riods were being older than age 30, being a cur- rent smoker, and fulfill- ing three DSM-IV crite- ria for dependence: tolerance, giving up or cutting back on impor- tant activities to drink, and drinking despite having physical and/or psychological problems.

Alcohol-dependent patients diag- nosed with comorbid depression and/or dysthymia reported an additional signif- icant mean decrease of 19 heavy drinking days, compared with their counterparts who were not diagnosed with those conditions.

“We were expecting sociodemo- graphic variables such as level of edu- cation, marital status, gender, and eth- nicity to be associated with change in heavy drinking over time,” Dr. Sarsour said. “However, in this study, none of these variables were significant predic- tors of change in heavy drinking status over time. This may have been due to the fact that the study population con- sisted of alcohol-dependent patients. We will do a follow-up analysis to see if these predictors are significant in pre- dicting change in heavy drinking in non-alcohol-dependent patients from the same national data set.”

Dr. Sarsour and four other members of the research team are employees of Eli Lilly. The other member of the research team was Dr. Howard B. Moss of the National Institute on Alcohol Abuse and Al- coholism, who sponsored the study.

The predictors of change in heavy drinking status over time were age and the meeting of certain DSM-IV criteria for alcohol dependence.

Saliva Test May Guide Smoking Cessation Treatment

BY KATE JOHNSON

MONTREAL — A simple saliva test to assess a smoker’s degree of nicotine dependence could become the first step of a smoking cessation treatment, a study has shown.

Light or heavy nicotine de- pendence could lead to a person’s success in quitting or risk of relapse, Caryn Lerman, Ph.D., said at the annual meeting of the Society of Behavioral Med- icine. Clinicians could use this information to guide treatment choices for their patients.

“We could decide whether someone needs smoking ces- sation counseling only, or whether they would do better with a patch, or if they need a med- ication such as bupropion or varenicline,” said Dr. Lerman, of the Transdisciplinary Tobac- co Use Research Center at the University of Pennsylvania, Philadelphia.

The saliva test measures the ratio of two nicotine metabo- lites, 3’-hydroxycotinine and co- tinine, to determine a person’s rate of nicotine clearance or metabolism, Dr. Lerman said.

A new study by her group has validated that smokers with acetylmorphine than with methadone. At baseline, both groups had spent a median of $1,200 (U.S.) per month on illicit drugs, which was reduced to $320 with diacetylmorphine and to $400 with methadone.

A total of 54 patients reported 79 se- rious adverse events—18 with methadone, 51 with diacetylmorphine, and 10 with hydromorphone. Over- doses and seizures were the most com- mon serious adverse events associated with diacetylmorphine.

“Sixteen of the 115 patients ran- domly assigned to receive diacetyl- morphine had a life-threatening over- dose or seizure during the study. Because the study included close medical supervision, these serious adverse events were promptly treated, and all patients recovered,” the investigators noted.

No potential conflicts of interest were reported.

Diacetylmorphine Compares Favorably With Methadone

T

T

reatment with injectable diacetylmorphine, the active in- gredient in heroin, compared favorably with methadone treatment of the a phase III clinical trial reported in the New England Journal of Medicine.

Patients who received diacetylmor- phine through the North American Opiate Medication Initiative were more likely to stay in treatment, reduce their use of illegal drugs, and scale back other illegal activities than were those given methadone. They also showed greater improvements in medical, psychi- atric, and economic status, and in their family and social relationships, which suggests a positive treatment ef- fect beyond reduction in illicit-drug use or other illegal activities,” said Eugenia Oviedo-Joekes, Ph.D., of the Universi- ty of British Columbia, Vancouver, and her associates (N. Engl. J. Med. 2009;360:777-96).

“Methadone, provided according to best-practice guidelines, should remain the treatment of choice for the major- ity of patients. However, there will con- tinue to be a subgroup of patients who will not benefit even from optimized methadone mainte- nance treatment with acetylmorphine,” said Dr. Lerman.

Injectable diacetylmorphine has been used in several European countries for many years. To assess its performance in a North American population, Dr. Oviedo-Joekes and her colleagues per- formed an open-label, randomized, con- trolled trial in Montreal and Vancouver. A total of 115 patients were ran- domly assigned to receive diacetyl- morphine, 111 to receive standard oral methadone, and 25 to receive injectable hydromorphone for validation of the self-reported use of illicit heroin by means of urine testing. All the study subjects had long histories of injectable drug use and extensive involvement in criminal activity, and all had under- gone multiple attempts at treatment.

The medications were administered daily and under supervision in clinics, and patients were allowed to switch, partially or totally, to oral methadone if they wished. Twenty-three of the di- acetylmorphine patients switched to methadone.

To ensure safety, all study subjects who received injectable medications were observed for 30 minutes after each injection.

After 1 year of follow-up, 67% of the diacetylmorphine group improved in il- licit drug use and other illegal activities, compared with 48% of the methadone group. Scores improved on more sub- scales on a measure of this outcome, and they improved to a greater degree, with diacetylmorphine than with methadone.

The rate of retention in treatment also was better with diacetylmorphine (84%) compared with methadone (75%). Rates of response and retention with hydromorphone were 64% and 88%, respectively.

The mean number of days of illicit heroin use during the preceding month declined from 27 to 5 with diacetyl- morphine and from 27 to 12 with methadone. At baseline, both groups had spent a median of $1,200 (U.S.) per month on illicit drugs, which was reduced to $320 with diacetylmorphine and to $400 with methadone.

A total of 54 patients reported 79 se- rious adverse events—18 with methadone, 51 with diacetylmorphine, and 10 with hydromorphone. Over- doses and seizures were the most com- mon serious adverse events associated with diacetylmorphine.

“Sixteen of the 115 patients ran- domly assigned to receive diacetyl- morphine had a life-threatening over- dose or seizure during the study. Because the study included close medical supervision, these serious adverse events were promptly treated, and all patients recovered,” the investigators noted.

No potential conflicts of interest were reported.

The saliva test measures the ratio of two nicotine metabo- lites, 3’-hydroxycotinine and co- tinine, to determine a person’s rate of nicotine clearance or metabolism, Dr. Lerman said.

A new study by her group has validated that smokers with acetylmorphine than with methadone. At baseline, both groups had spent a median of $1,200 (U.S.) per month on illicit drugs, which was reduced to $320 with diacetylmorphine and to $400 with methadone.

A total of 54 patients reported 79 se- rious adverse events—18 with methadone, 51 with diacetylmorphine, and 10 with hydromorphone. Over- doses and seizures were the most com- mon serious adverse events associated with diacetylmorphine.

“Sixteen of the 115 patients ran- domly assigned to receive diacetyl- morphine had a life-threatening over- dose or seizure during the study. Because the study included close medical supervision, these serious adverse events were promptly treated, and all patients recovered,” the investigators noted.

No potential conflicts of interest were reported.

The findings support the val- idity of the saliva test as a bio- marker to predict success with transdermal nicotine for smok- ing cessation, the authors con- cluded. “We advocate a multi-tier treatment algorithm which sug- gests that slow metabolizers may need nothing more than counseling or nicotine patch, but fast metabolizers are candidates for more nonnicotine treatments which may be more costly and have more side effects than the patch,” they wrote (Clin. Pharmacol. Ther. 2008;84:320-5).