Commentary

Depression and alcoholism

L. SHER

From the Division of Neuroscience, Department of Psychiatry, Columbia University, New York, USA

Introduction

Drinking alcohol-containing beverages is a common habit in Western countries. In most Western societies, at least 90% of people consume alcohol at some time during their lives, and 30% or more of drinkers develop alcohol-related life problems. Severe alcohol-related life impairment, alcohol dependence, is observed at some time during their lives in ~10% of men and 3–5% of women, with an additional 5–10% of each sex developing persistent but less intense problems that are diagnosed as abuse. Alcohol abuse and dependence are commonly called alcoholism.

Comorbidity between depression and alcoholism

Depression and alcoholism are associated with considerable morbidity, disability, and mortality, and co-occur more commonly than expected by chance. The extent of comorbidity between depression and alcoholism was demonstrated by the results of several large epidemiological studies. The National Comorbidity Survey (NCS), a nationally representative survey in the US, found that compared with non-depressed respondents in the NCS, the lifetime odds of alcohol dependence were significantly elevated for both men (2.95) and women (4.05) with major depression. Conversely, NCS data demonstrated a two-fold increase in the lifetime odds of depression among subjects with alcohol dependence. Spaner et al. examined the comorbidity between major depression and alcohol dependence in Edmonton, Canada, and found that 30.5% of individuals with an affective disorder also met criteria for alcohol dependence, compared with only 16.8% of those who did not have an affective disorder. Similarly, the National Longitudinal Alcohol Epidemiology Study demonstrated that amongst those with major depression, 32.5% met criteria for a lifetime diagnosis of alcohol dependence, compared with only 11.2% of those who did not
meet criteria for major depression. Rates of depression are more elevated among people who seek treatment for alcoholism. Possibly, some of this elevated comorbidity may be due to increased treatment-seeking among people with alcoholism who also experience symptoms of depression.

The psychological impact of alcoholism

A recent study has compared clinical parameters in the two groups of depressed patients according to the presence or absence of a lifetime diagnosis of alcohol dependence. The authors found that depressed patients with a lifetime diagnosis of alcohol dependence had lower Global Assessment of Functioning Scores, were more likely to have borderline, schizotypal and paranoid personality disorders and cannabis dependence, and reported more paranoia and interpersonal sensitivity, compared with depressed subjects without a history of alcohol dependence. Another recent study has compared clinical parameters and cerebrospinal fluid (CSF) monoamine metabolites in depressed patients, with and without a past history of alcoholism. Depressed subjects with a history of alcoholism had lower CSF homovanillic acid (HVA) levels, were more likely to be tobacco smokers, and had higher lifetime aggression and current suicide ideation scale scores, compared with depressed subjects without a history of alcoholism. Hasin et al. have reported that major depressive disorder during sustained abstinence predicts substance dependence relapse. Depression may reduce the resolve needed to refrain from alcohol and/or drug use; alternatively, depression may lead to self-medication with alcohol.

The physiological impact of alcoholism

Dopaminergic abnormalities may contribute to alcohol craving in depressed individuals. Depressed patients with a history of alcoholism have lower CSF HVA levels than depressed patients without a history of alcoholism, consistent with the evidence indicating that chronic alcohol consumption leads to reduction in available dopamine, which is restored by ethanol intake, and supporting the importance of dopaminergic mechanisms in the biology of alcohol dependence. Roy et al. reported that depressed patients with alcohol dependence had significantly lower concentrations of CSF HVA than never depressed patients with alcohol dependence. The dopaminergic system in patients with comorbid depression and alcohol dependence is probably more impaired than that in patients with either diagnosis alone. Individuals with a history of alcoholism also have other biological abnormalities, such as changes in the γ-aminobutyric acid, the N-methyl-D-aspartate, endogenous opioid, and serotoninergic systems in the brain. In summary, several lines of evidence suggest that depressed individuals with a past history of alcoholism are more impaired than depressed subjects without a history of alcoholism. Treatments may be less effective for depressed patients with a history of alcoholism than for other depressed patients. Therefore, it is important to recognize a history of alcoholism in patients with depression.

Recognition of a history of alcoholism, and clinical implications for practitioners

The clinical assessment of current and past alcohol use and alcohol-related disorders should be considered a routine part of all psychiatric or medical evaluations. The comorbidity of depression and alcoholism may be overlooked in primary care and psychiatric clinics. This may be related to the clinician’s inability to gather the appropriate history because of the patient’s uncooperativeness, or the clinician’s failure to conduct an appropriate diagnostic interview. Clinicians sometimes do not ask the most basic questions about alcohol or substance use. Attitudes and perceptions on the part of both the physician and the patient may create barriers to communication. Both depression and alcoholism may be seen as stigmatizing, and therefore clinicians may avoid the issue by focusing on presenting symptoms. Several studies have reported that overall rates of routine detection of alcoholism in medical and psychiatric practice are low, and that clinicians are even less likely to detect alcoholism in patients who are employed, married, White, insured, or female. Correct diagnosis of a history of alcoholism and/or substance misuse is often made more difficult by the characteristic defences of patients with these disorders (e.g. minimization, denial, projection, grandiosity). In addition, heavy alcohol use can impair memory, which may make the patient’s information during history-taking less reliable. Therefore, clinicians should gather information from several resources when assessing patients with possible alcohol-related problems, including collateral informants and the patient’s
medical records. Clinicians are obligated to obtain patient consent before contacting collateral informants. When eliciting the history, the clinician should address the patient’s concerns about disclosure of information to family members, friends, employers, and legal authorities. Patients should be reassured that information provided will be kept confidential. If the patient observes that the clinician is interested enough in the case to contact family members, this may help establish a more trustful therapeutic relationship. It is important to avoid, at least initially, questions that are most likely to make patients with alcoholism particularly defensive. It is often useful first to review the patient’s life history as well as medical, legal, and emotional problems. After this review, a parallel chronological history of the patient’s use of alcohol and drugs should be obtained. The interviewer should begin question with how, rather than why, to reduce the appearance of being judgmental.

All depressed patients should be asked periodically about alcohol and drug use patterns throughout a course of treatment, and advised to abstain from alcohol and substance use. It is important to maximize the chance of long-term sobriety in patients with depression. Relapse prevention is one of the most important tasks in the management of depressed patients with a past history of alcoholism. Different types of situations, such as anger and resentment associated with interpersonal encounters, and either direct or indirect social pressure to drink, may increase the likelihood of relapse. Screening questionnaires such as the Short Michigan Alcoholism Screening Test, the CAGE questionnaire, and the Alcohol Use Disorders Identification Test can help to detect relapse. Labile hypertension and gastrointestinal symptoms may indicate that a patient drinks alcohol. Laboratory tests (e.g. serum transaminases, bilirubin, prothrombin time, partial thromboplastin time, mean corpuscular volume of erythrocytes) can also help to identify relapse to the extent they are sensitive to heavy drinking. Although biochemical tests generally are less sensitive than verbal tests in screening for alcohol problems, they may prove particularly useful in identifying patients unwilling or unable to acknowledge their levels of drinking, and in corroborating findings from self-report measures. It is important to note that communication between a patient and his or her physician is the cornerstone of all therapeutic interactions, including evaluation and treatment of depressed patients with a history of alcoholism. Improving our diagnostic approach to depressed individuals with a history of alcoholism is of critical importance to improvement in the treatment of depressive and alcohol use disorders.

References


