Clinical depression in heavy drinkers of alcohol

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The final part of our special feature considers the association between alcohol dependence and clinical depression, as well as the treatment of depression in alcoholics

On many occasions, patients admitted into hospitals have been found to be taking antidepressants, even though their main problem is alcohol dependence. In both primary care and general psychiatry, patients with drinking problems are commonly prescribed antidepressants. This may be because the only complaints from such patients are of depression or inability to cope. The effect of drinking is minimised, evaded, or genuinely not seen by patients as relevant. It has been shown that drinking problems remain undetected despite many consultations.[1,2]

ALCOHOL AND DEPRESSION

An association between depression and alcohol dependence is seen in many cultures.[3–6] A study by Kessler et al found that a quarter of patients who have had depression at some point in their lives also reported problems with alcohol. The study also reported that 15.4 per cent of patients who were then suffering from depression also met the criteria for alcohol dependence.[7] Alcohol dependence multiplies the suicide rate four to five-fold.[8] There are a number of explanations for the relationship between depression and alcohol dependence. These are discussed below.

A form of self-medication Alcohol- dependent people often tell their family or therapist that they drink to relieve depression. However, retrospective explanations for excessive drinking and reasons given by alcoholic patients to explain relapse, may not be reliable. It is known that when people behave in a way that causes distress, they tend to look for explanations that excuse, or give meaning to, what seems to be pointless behaviour.

When the temporal relationship between alcohol dependence and emotional difficulties was studied in people with alcohol dependence and in controls, it was found that depression was not a frequent cause of alcohol dependence, at least not in men.[9] When interviews were conducted with 2,713 alcohol-dependent patients and 919 non-alcohol dependent controls,[9] lifetime depressive disorder or dysthymia independent of alcohol misuse was reported less often in the alcohol-dependent patients (14 per cent) than in controls (17.1 per cent).

A quarter of patients who have had depression also reported problems with alcohol

A long-term follow-up or prospective study of the general population has been used to investigate the proportion of cases of alcohol use disorders that are preceded by mood disorders. Such a study can eliminate recall bias, as well as bias that comes from only studying people referred to clinics. In the American state of New York, a random sample of adults studied in 1986, 1989 and 1993 showed that in women, depressive symptoms over a one-month period were predictive of subsequent alcohol problems up to four years later.[10] There was no such finding in males. Researchers also studied the link between drinking and depression by asking women to make daily telephone calls and record their mood as well as any drinking. There was no indication that depressed mood (or premenstrual symptoms) triggered drinking.[11]

Prospective studies are also important in understanding whether depression precedes or follows drinking in recovering alcohol- dependent patients. When 101 patients were followed for one year after hospital admissions for alcohol dependence, monthly scores of patients' self-reported depression did not predict relapse to drinking.[12]

In summary, "self-medication" may often be more of a retrospective justification for drinking than a true explanation.

Does drinking cause depression? The answer is yes.[8] Drinking in the early years could have been for social reasons but if the drinking later gets out of control, some patients who are genetically predisposed start experiencing depression when exposed to adverse conditions, which act as triggers of the condition. The trigger could be a driving offence, demotion at work, or increasing tension at home. Later, more severe conditions, such as the break-up of a marriage or dismissal from work, contribute to serious depression which becomes worse if drinking has alienated friends and family. Isolation also compounds feelings of loss and failure.

Many drinkers experience euphoria for an hour or so after taking their first few drinks, particularly when they are in congenial company and life is going well. However, there then follows sedation which can be accompanied by low mood, especially during bad times. Many suicide attempts are made after people have been taking alcohol.

Common cause Another explanation of the association between alcohol dependence and mood disorders could be that there are factors, in early family life or in the genes, which independently cause both conditions.

The United States National Co-morbidity Survey interviewed a general population sample of 8,098 individuals, and asked them about their mental health and history of substance use, as well as that of their parents. Considerable association was found between alcohol abuse/dependence in the individuals and major

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depression or alcohol abuse/depression in their parents.[13]

A Norwegian study in 2,570 pairs of twins aged 18–25 found that the correlation between alcohol consumption and depressive symptoms in males was, at that age, wholly explainable by genetic factors. Among females, genetics played a smaller part in explaining the correlation (r=0.18).

Artefact The symptoms of alcohol dependence mimic those of depression. The patient's mood could be low because of disharmony at home, threat of dismissal from work or actual unemployment. Following an evening of drinking, there is a tendency for the alcoholic patient to wake up early in the morning feeling uneasy when the effect of the alcohol wears off. The patient expresses feelings of failure and guilt for letting others down. In addition, some people can be tearful and full of remorse when drunk. Anxiety symptoms, which are frequent in depressive illness, also occur frequently in alcohol dependence, especially at times when the individual has not been able to obtain a drink or is trying to cut down. Thus, in some cases when depression is diagnosed in heavy drinkers, it is actually a misdiagnosis because the symptoms are due to the drinking problem.

Referral bias There is a higher rate of an association between depression and alcohol dependence in samples drawn from clinics than from the general population. The reason may be that some alcohol-dependent people may only seek help if depressed. However, general population surveys using strict diagnostic criteria still reveal an overlap between alcohol dependence and depression.[3]

Treatment

A study carried out in Glasgow found that by the 10th day of a detoxification programme, about one-third of patients who had met the criteria for emotional/psychiatric illness as measured using a general health questionnaire on the first day, had recovered. If the patient then abstains or drinks without serious relapse, only one in five still met the criteria at day 60.[14] A German study found that 42 per cent of patients still met the criteria for anxiety or depressive disorder at three weeks after detoxification, but at the end of the next three weeks the rate had fallen to that of the general population.[15]

The recovery of mood is partly due to an improvement in social rewards. When others see the drinker starting to tackle the problem, their attitudes change: the family may become more supportive or the patient's employer may consider reinstatement. Also, the brain is no longer being subjected to large doses of a sedative. Sleep may remain somewhat broken for several weeks after that, with abnormalities in the sleep pattern being detectable for up to three months. However, this need not be regarded necessarily as evidence of continuing depression. It is advisable to avoid hypnotics, as sleep often resolves with time.

When depression does not lift with abstinence, it may be due to social isolation, harboured resentment and lack of rewards in life following on from the devastation caused by drinking. Or there may be a primary depressive illness, which careful history-taking has demonstrated to be independent of either drinking or acute withdrawal. A return to problematic drinking is associated with return of the psychiatric symptoms.[14,15]

Persistent low mood It is probably important to treat low mood that persists. Persisting low mood beyond a month after detoxification was predictive of relapse in some studies.[12,15] Treatment will include helping the patient to see the dangers of trying to use alcohol to lift mood and explaining how alcohol can worsen mood, both in intoxication and withdrawal.

Cognitive behavioural psychotherapy is widely practised in alcoholism treatment centres, but there is little evaluation of it for depressed alcoholics. The advantage over relaxation therapy was evident in the three-month period after the treatments had finished.[16]

Antidepressants

The tricyclic antidepressants, imipramine and desipramine, and the selective serotonin re-uptake inhibitor (SSRI), fluoxetine, have been tested in patients who are still depressed after detoxification.[17–20] These drugs lift mood and therefore reduce the likelihood of relapse into heavy drinking. Theoretically, SSRIs are preferred to tricyclic antidepressants because the former do not interact to exaggerate the sedative effects of alcoholic drinks, and are less dangerous in overdose.

The use of antidepressants should be as in treating depression uncomplicated by drinking, but with an emphasis on sustaining abstinence through proven methods, such as attendance at meetings of Alcoholics Anonymous.

Alcohol-dependent patients without depression have been treated with SSRIs and with nefazodone to evaluate their role to reduce drinking. However, with the possible exception of sertraline and citalopram, the weight of evidence is that they do not help to prevent relapse.[19,21,22]

Disulfiram is used to treat some patients with alcohol dependence, because of the extremely unpleasant reaction it causes if even a small amount of alcohol is imbibed. However, disulfiram inhibits liver enzymes and potentially could have serious interactions with drugs acting on the central nervous system, such as tricyclic antidepressants. In rare instances, the patient could experience peripheral neuropathy.

Acamprosate is used to maintain abstinence after alcohol withdrawal. There are no reported adverse reactions with either this drug or naltrexone, which can also be prescribed for preventing relapse.

References The full list of references cited by the author are available on request by contacting Hospital Pharmacist and can also be found at www.pjonline.com/hp

References

1. Deehan A, Templeton L, Taylor C, Drummond C, Strang J. Low detection rates, negative attitudes and failure to meet the Health of the Nation alcohol targets: findings from a national survey of GPs in England and Wales. Drug Alcohol Rev 1998;17:249 58.
2. W ilkins R. The hidden alcoholic in general practice. London: Elek; 1974.
3. Lynskey MT. The co-morbidity of alcohol dependence and affective disorders: treatment implications. Drug Alc Depend 1998;52:201 9.
4. Tsai S-Y, Chen C-C, Yeh E-K. Alcohol problems and long term psychosocial outcome in Chinese patients with bipolar disorder. J Affective Dis 1997;46:143 50.
5. Robin RW , Long JC, Rasmussen JK, Albaugh B, Goldman D. Relationship of binge drinking to alcohol dependence, other psychiatric disorders and behavioural problems in an American Indian tribe. Alc: Clin Exp Res 1998;22:518 23.
6. Launay C, Petitjean F, Perdereau F, Antoine D. Addictive behaviour in mental disorders: a survey in the Paris area. Ann MØd Psychol 1998;156:482 5.
7. Kessler RC, Nelson CB, McGonagle J, Liu M, Swart M, Blazer DG. Co-morbidity of DSM-III-R major depressive disorder in the general population: results from the US National Co-morbidity Survey. Br J Psychiatry 1996;168(Suppl 30):17 30.
8. Driessen M, Veltrup C, Weber J, John U, W etterling T, Dilling H. Psychiatric co-morbidity, suicidal behaviour and suicidal ideation in alcoholics seeking treatment. Addiction 1998;93:889 94.
9. Schuckit M, Tipp JE, Bucholz KK, Nurnberger JI, Hesselbrock VM, Crowe RR et al. The life-time rates of three major mood disorders and four major anxiety disorders in alcoholics and controls. Addiction 1997;92:1289 304.
10. Moscato BS, Russell M, Zielezny M, Bromet E, Egri G, Mudar P et al. Gender differences in the relation between depressive symptoms and alcohol problems: a longitudinal perspective. Am J Epidemiol 1998;146:966 74.
11. Perrine MwB, Naud, S.von Eye A. The menstrual cycle and two years of daily self-report alcohol consumption and ratings of mood and health. Presented at the Research Society on Alcoholism Annual Meeting. Montreal: Research Society on Alcoholism; 2001.
12. Greenfield SF, Weiss RD, Muenz LR, Vagge LM, Kelly JF, Bello LR et al. The effect of depression on return to drinking a prospective study. Arch Gen Psychiatry 1998;556:259 65.
13. Kendler KS, Davis CG, Kessler RC. The familial aggregation of common psychiatric and substance use disorders in the National Co-morbidity Survey: a family history study. Brit J Psychiatry 1997;170:541 8.
14. Allan CA, Smith I, Mellin M. Changes in psychological symptoms during ambulant detoxification. Alcohol Alcohol 2002;37:241 44.
15. Driessen M, Meier S, Hill A, Wetterling T, Lange W, Junghanns K. The course of anxiety, depression and drinking behaviours after completed detoxification in alcoholics with and without co-morbid anxiety and depressive disorders. Alcohol Alcohol 2001;36:249 55.
16. Brown RA, Evans DM, Miller IW, Burgess ES, Mueller TI. Cognitive-behavioural treatment for depression in alcoholism. J Consult Clin Psychol 1997;5:715 26.
17. Mason BJ, Kocsis JH, Ritvo EC, Cutler RB. A double-blind, placebo-controlled trial of desipramine for primary alcohol dependence stratified for the presence or absence of major depression. JAMA 1996;275:761 7.
18. Cornelius JR, Salloun IM, Ehler JG, Perel JM. Fluoxetine reduced depressive symptoms and alcohol consumption in patients with co-morbid major depression and alcohol dependence. Arch Gen Psychiatry 1997;54:700 5.
19. Pettinati HM, Oslin D, Decker K. Role of serotonin and serotonin-selective pharmacotherapy in alcohol dependence. CNS Spectrums 2000;5:33 46.
20. McGrath PJ, Nunes EV, Stewart JW, Goldman D, Agsoti V, Ocepek-Wellkson K et al. Imipramine treatment of alcoholics with primary depression: a placebo-controlled clinical trial. Arch Gen Psychiatry 1996;53:232 40.
21. Garbutt JC, West SL, Carey TS, Lohr KN, Crews FT. Pharmacological treatment of alcohol dependence a review of the evidence. JAMA 1999;281:1318 25.
22. Pettinati HM, Volpicelli JR, Luck G, Kranzler HR, Rukstalis MR, Cnaan A. Double-blind clinical trial of sertraline treatment for alcohol dependence. J Clin Psychopharmacol 2001;21:143 53.