

# 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

**O**n 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.<sup>1,2</sup>

## ALCOHOL AND DEPRESSION

An association between depression and alcohol dependence is seen in many cultures.<sup>3-6</sup> 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.<sup>7</sup> Alcohol dependence multiplies the suicide rate four to five-fold.<sup>8</sup> 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.<sup>9</sup> When interviews were conducted with 2,713 alcohol-dependent patients and 919 non-alcohol dependent controls,<sup>9</sup> 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.<sup>10</sup> 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.<sup>11</sup>

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.<sup>12</sup>

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.<sup>8</sup> 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.<sup>13</sup>

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.<sup>3</sup>

## 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.<sup>14</sup> 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.<sup>15</sup>

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.<sup>14,15</sup>

**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.<sup>12,15</sup> 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.<sup>16</sup>

## 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.<sup>17–20</sup> 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.<sup>19,21,22</sup>

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](http://www.pjonline.com/hp)

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