Alcohol and benzodiazepines generate anxiety, panic and phobias

Samuel I Cohen MD FRCPsych

J R Soc Med 1995;88:73–77

Keywords: *alcohol; benzodiazepines; anxiety; panic; phobias*

SUMMARY

In almost half the patients seeking advice for anxiety, panic and phobias the cause was alcohol or benzodiazepines. In the remainder it was psychological, usually a state of conflict or a traumatic event. When symptoms are persistent following a distressing event it is often the case that alcohol or benzodiazepines are keeping them going. There is a large variation in individual vulnerability and the mechanism responsible for these symptoms is rebound arousal.

Many can accept the need to stop these substances when the above is explained, and when it is pointed out that they have a choice between the symptoms and the drink or tablets. These patients are often extremely ill and can be restored to complete health. Illustrative case-histories are given.

INTRODUCTION

Many people have anxious temperaments and minor phobias are very common. Doctors are consulted as a rule only if anxiety or a phobia begins to interfere with daily living. When consulted about problems of this kind one very important question to ask is 'What has caused the person's level of anxiety or arousal to rise above its basal level so as to make intolerable features that were previously contained?' The common psychological causes of severe anxiety are the presence of persisting major conflicts in the person's life or the occurrence of a major distressing event. In the former case, the anxiety will subside when the conflict is resolved in one way or another and, in the latter, it will subside with the passage of time. If it does not, then one must ask 'What is keeping it going?' The answer to both these questions may frequently be the taking of alcohol, not necessarily in amounts that would be regarded as 'alcohol abuse', or the taking of benzodiazepine drugs and the mechanism responsible for the generation of the anxiety is rebound arousal.

A COMMON PROBLEM

All patients referred for anxiety or phobias seen for the first time in one unselected general teaching-hospital psychiatric clinic over a period of 2 years, 1988/1990 were reviewed. An assessment was made of the frequency with which alcohol or benzodiazepines were the cause of these symptoms. The only criterion for causation was that the patients lost their symptoms when they stopped taking these substances. There were 59 such patients in whom there was no reference to alcohol or benzodiazepine use in the referral letter except for Case 4 (below) where it had not been appreciated by the referrer that there was any connection between the drug and the symptoms. In 22 of the 59 patients alcohol was the cause of the symptoms and in four benzodiazepines. Four more refused to stop their benzodiazepine drugs and although it was probable that these were the cause of the symptoms one could not be as certain as in the cases of those who were relieved when they stopped. In the remaining 33 patients, the cause was one of the usual psychological causes of these symptoms such as a major persisting conflict. From the patients reviewed the following group of seven, who illustrate different points in diagnosis and management were selected. They were all severely ill and became completely well when they stopped taking these substances so that each example allows a before/after comparison to be made.

ILLUSTRATIVE EXAMPLES

Case 1

A 55-year-old senior civil servant had 'A severe phobia of being with people' for several weeks. His work involved contact with the public and he had had to run out of the office when someone entered. He had attended a self-help phobias group without any improvement. There had been no recent major disturbing events in his life but he was a very heavy drinker, suffered from morning shakes, was extremely anxious and was trembling. Six weeks after stopping drinking he was free of symptoms.

Professor Emeritus of Psychiatry, The London Hospital Medical College, London, UK
Correspondence to: Professor S I Cohen, 8 Linnell Drive, London NW11 7LT, UK

Follow up

A year later he attended with a recurrence of the same symptoms, he was again drinking and the symptoms were again relieved when he stopped. Arrangements were made for him to attend one of the agencies for helping heavy drinkers.

Comment

This patient was probably suffering from repeated alcohol withdrawal symptoms produced by the rebound arousal following the heavy drinking of the previous night. It is essential to make the correct diagnosis before treatment; self-help groups will do nothing for a poisoned brain.

Case 2

This 27-year-old woman had been anxious, tense, depressed, irritable with poor sleep and appetite for several years. More recently, she had developed anxious hyperventilation with pins and needles. At times the symptoms amounted to severe panic. There were major problems in her life which had increased during the time that she had had her symptoms and for 2 years she had been treated by a psychologist attached to a general practice. She was drinking half a bottle or more of whisky per day 'because of the problems and anxiety'. Five weeks after stopping drinking she had no symptoms.

Comment

The question here was which was the cart and which was the horse? Was she drinking because of her problems or did she have symptoms because of the alcohol?: i.e. what was the diagnosis? The only way to resolve this question is to stop drinking and to review after several weeks.

Problems like the above are common, but from time to time one sees patients with similar symptoms whose consumption of alcohol is apparently much more modest, as in the following example.

Case 3

A 35-year-old man had become too frightened to drive his lorry. He was drinking about nine whiskies and two glasses of lager once or occasionally twice each weekend and was totally relieved of his symptoms a few weeks after stopping drinking. His wife was confident that he was not drinking more than he stated as she was always present in the pub with him and he did not drink at home.

Comment

Whilst one can never be certain about the amount that someone is drinking it is important to consider that some people are much more vulnerable than others in their response to drugs and other substances.

Case 4

A 32-year-old married woman, who was a senior secretary in a financial institution was referred for 'help with benzodiazepine withdrawal and phobic anxiety'. She had been a nervous child with a fear of heights and she had twice previously experienced episodes of panic, both in the setting of upsetting events in her life 10 years and 4 years previously and *both had subsided*. She had been happily married for 10 years but she and her husband were distressed at her infertility, which was fully discussed with them. Two years previously she had had an *in vitro* fertilization which had failed. She became distressed and was given Lorazepam 1 mg and Diazepam 10 mg daily which she was still taking. She had been anxious and panicky ever since. It was understandable that she should have become distressed, but it seemed unusual that her symptoms had persisted since previously in her life anxiety following distressing events had subsided. It was reasonable to suppose that the benzodiazepine drugs were prolonging it. There was no way of ascertaining the cause until after the drugs were stopped. She was advised accordingly and 8 weeks later she said 'I am very well—people have been telling me how well I look'. The only symptoms she had after 8 weeks were some myoclonic jerks which had been present at the start and were gradually declining in frequency.

Follow up

A year later she telephoned as she had become panicky and it turned out that this had happened when a friend in a neighbouring office gave birth to a baby. The symptoms subsided in about a week with no special treatment: 'I'd never take another tablet'.

Comment

The persisting myoclonic jerks, a rebound phenomenon, indicate that the brain has still not returned to its normal state.

Case 5

A married 51-year-old woman was referred from the dental department as she needed dentures but could not tolerate things put in her mouth and behavioural methods of helping her had failed. She said, however, that her main problem was not this but 'anxiety, panic and depression for 30 years'. She had never been an anxious person before the age of 21 and at that time had a panic attack following an abortion. She had been on sedatives of various kinds ever since, more recently taking Oxazepam 15 mg daily. She had had symptoms ever since. Six weeks after stopping the tablets 'I couldn't breathe—I had tension in my arms and legs—it's gone'. After 12 weeks, 'I'm very well thank you—a great improvement'. At that point I asked her whether she wished

to deal with the problem with her teeth to which she replied 'I might be toothless but I'm calmer'.

Comment

After stopping a so-called sedative substance this patient is calmer.

Case 6

This 75-year-old woman had always been rather phobic of lifts and trains. For 2 years she had had severe anxiety, panic, terror, misery, following an operation on her knee since when she had taken Lorazepam 2 mg daily. She was so frightened that she could not stay in the car whilst her husband went into a shop to buy a newspaper. Her tablets were stopped over a period of 4 weeks. At the end of 5 weeks she said it had been 'the worst 5 weeks of my life'. At 8 weeks there had been a few spells of feeling normal lasting for up to a day. At 12 weeks she was only occasionally tearful or anxious; severe insomnia persisted but she had been in a lift. At 16 weeks she was completely well and happy. She could sit in the car long enough for her husband to have his hair cut.

Case 7

A severe agoraphobic since 17 this 55-year-old woman had had a leucotomy, after which she was able to cope rather better and eventually to marry. She always needed one person with her when she went out but 10 years previously began to need two people and soon afterwards stopped going out altogether. She was attending a supportive clinic run by a colleague who found that he could no longer support her as an outpatient. Her husband was at the end of his tether and he requested admission. There were many problems in her life and upbringing that were responsible for the development of symptoms in her teens but we addressed the question of why they became progressively more severe 10 years earlier. There was full documentation of her treatment for over 30 years and we were able to see that she had started treatment with Chlordiazepoxide in 1969 which was later changed to Diazepam. There had been an increase in the dose about 15 years before and she had taken Diazepam 40 mg at least daily since then, occasionally more. It seemed reasonable therefore to begin by attempting to stop this drug and when she was given an explanation of why this could be helpful her response was 'if you say that's what they do I don't want to take them'. Four weeks after the last dose she began to walk as far as the hospital shop. At the end of 10 weeks she went home but still had many symptoms. After 20 weeks the colleague visited her at home and wrote 'much to my surprise the situation had totally changed. She appeared calm and cheerful . . . going out every day . . . visiting a friend. She had not been able to go this far from home for 20 years. She has been taking her dog for a walk and sitting on a bench watching the world go by. She goes out to buy tobacco and papers for her husband without panicking'.

A year later she was doing even more.

DISCUSSION

Rebound

When any self-regulating physiological system is subject to interference its control mechanism responds so as to minimize the effect of the interference. If the interference ceases then rebound phenomena will appear and will be more severe if the interference stops suddenly. Thus, rebound effects following the use of drugs are generally more severe with those drugs that have a short half-life as is very well known in the case of the benzodiazepines when, after an evening dose, early morning insomnia is followed by increased anxiety the following day. Rebound phenomena with the use of benzodiazepines have been known for a long time[1–3]. Similarly with alcohol and as long ago as 1973 Oswald's team (Ogunremi *et al.*)[4] commenting on rebound wakefulness and anxiety as a consequence of stopping barbiturates or alcohol stated that the patients 'may then turn for relief to the very agents that have contributed to their anxiety'. This problem is not at all unusual following bereavement or a major trauma when benzodiazepines are given inappropriately, or people begin to drink; the symptoms which would then be expected to subside do not do so. Alcohol abuse among patients with so called 'post-traumatic stress disorder' is common[5].

Both alcohol and benzodiazepines potentiate the action of GABA[6] the major inhibitory neurotransmitter and when they are stopped rebound arousal follows, with anxiety and seizure disorders ranging from myoclonic jerks to *grand mal*. Whilst this effect of alcohol appears to subside relatively quickly the effect of benzodiazepines seems to persist for very much longer as the above cases illustrate. If the patient is to be relieved then it is desirable that the changes should be reversed as quickly as possible as a prolonged period of withdrawal will prolong the withdrawal symptoms and will increase the temptation to resume taking the drug. Giving small amounts symptomatically after stopping the drugs merely prolongs the agony of withdrawal symptoms.

Vulnerability

There is an enormous range of variability in the response to drugs and other substances not least to alcohol and benzodiazepines and some people develop symptoms on doses that do not appear to harm others. In the case of alcohol Lishman[7] has shown that over one-half of the brains of heavy drinker can be shown to have shrunk (and about half had not). At much lower levels of consumption there must also be a variation in the vulnerability of the brain so

that some people develop anxiety symptoms on an amount of alcohol that does not produce symptoms in others. Patients not infrequently say that they know of other people taking even larger quantities of alcohol or drugs who are not ill and it is therefore important to explain that vulnerability varies, and that it is not only the absolute quantity of substance that is important but the quantity for that individual.

How to stop benzodiazepines

The patient will ask why he/she should stop taking the tablets especially as most usually feel some relief from them. The answer to the question must consist of an explanation of how these drugs cause the symptoms of anxiety, sometimes using a diagram to explain the nature of rebound arousal. It should be pointed out that he or she is still anxious despite taking the drugs, that the only anxiety that is being relieved is that caused by the drug and that if they stop they will eventually feel much better than they have felt for a long time. I sometimes add that they may not be able to remember what it feels like to have a normal brain, or words to that effect, and that sleep is likely to become far sounder than it has been for a long time. Most patients will ask about withdrawal symptoms since these have had a great deal of publicity. A full explanation should be given of what is likely to happen: they will feel more anxious, they may be unable to do their job properly, their sleep will be more disturbed, they may have nightmares and that these symptoms may last for anything from 3 weeks to 3 months or so, but that they may be one of the fortunate ones in which they are over quickly. It is made clear, however, that there is no way to obtain the benefits of stopping without going through this withdrawal period. I usually say that many others have done so and are amongst the most grateful patients I have had. If the symptoms are intolerable they are free to come to see me or should go to see their family doctor to whom I always give a full explanation of the treatment plan sometimes reinforced by a telephone call. For reasons given above, it is essential to shorten the withdrawal period as far as possible and whilst there are dangers in rapid cessation of very large doses the average patient can reach a zero dose in about 2–3 weeks. Withdrawal symptoms last a varying time, usually 6–8 weeks but sometimes longer. It is essential when giving this advice to avoid making people feel guilty that they are taking these substances, and it should be explained that they have a choice between their symptoms and their tablets, difficult though it may be to make this choice. Finally, some judge it useful to replace a short acting drug with a longer acting drug such as Diazepam before beginning withdrawal[8] and it occasionally can be helpful during the withdrawal phase to give a small dose of a phenothiazine by day or Chloral at night though this is not usually necessary.

Similarly, in the case of patients whose symptoms result from alcohol. It is important to avoid the use of terms like 'alcoholic' or 'heavy drinker' or 'abuse'. To talk down to the patient is likely to make him feel that he is being treated like a naughty child and to provoke a negative response, whereas to give him an adult choice between his substance and his symptoms is more likely to succeed. This approach is particularly useful in dealing with anxiety symptoms in relatively modest drinkers where there may not be a problem of addiction.

Although anxiety, panic and depression are well known to occur in heavy drinkers, many textbooks strangely do not mention these symptoms and confine themselves to problems of addiction on the one hand and to serious complications like dementia, Wernicke-Korsakoff syndrome, paranoid disorder or morbid jealousy on the other. However, The Royal College of Psychiatrists' report[9] *Alcohol: Our Favourite Drug* writes that 'anyone who thinks he is drinking because of his/her "nerves" must ask whether the "nerves" are troubled because of drinking'. It states that in about 95 of 100 patients where this question arises the answer is that the drink is the cause of the symptoms, that any treatment with psychotropic drugs where depression or phobia are caused by alcohol may make matters worse and that usually the symptoms are relieved in 2 weeks if the patient stops drinking. Too many patients with similar symptoms are referred to various ancillaries in general practice and receive symptomatic treatment, instead of to a psychiatric clinic where a proper diagnosis could be made (Cases 1 and 2). It is erroneous to think that these symptoms can be called 'minor'. Whether a problem is major or minor can be decided only after the diagnosis has been made and not on the nature of the symptoms. It has been reported[10,11] that over half of 60 alcoholics had agoraphobia or social phobia and that abstinence was associated with substantial improvement. Professor Marks of The Maudsley Hospital (Samarasinghe *et al.*[12]) insists that such patients should withdraw from these substances before starting behaviour therapy. Ashton[13] described this problem in the case of benzodiazepines very clearly in 1984, but these and other observations have not been taken up sufficiently firmly by doctors and, accordingly, many are suffering from very unpleasant symptoms of anxiety or phobia which could be relieved. I suspect that many attenders at self-help groups and clinics for 'stress', tension or phobias and many of those diagnosed as post traumatic stress disorder are probably drinking and would get well if they stopped completely for a short time and similarly but in smaller numbers for benzodiazepines.

In the case of alcohol it takes time and progressive damage to the brain to get from a state of normality to paranoid psychosis and even more damage to arrive at dementia. What we are considering here is the damage,

reversible as a rule, that may be done before this. The possibility of the use of sedative substances should be considered in all patients presenting with anxiety, panic and phobias.

Benzodiazepine drugs have no place in the treatment of anxiety though they have their indications in anaesthesia, epilepsy, orthopaedic surgery and sometimes for the control of extremely disturbed behaviour in a patient suffering from an acute psychosis. The treatment of anxiety will depend upon the cause and sometimes patients need to be helped to face the fact that their problems and conflicts may not have an easy solution. The cases described *do* have a simple solution and the doctor's role is to help the patient carry through what may be a painful task to a successful conclusion.

REFERENCES

1 Morgan K, Oswald I. Anxiety caused by a short-life hypnotic. *BMJ* 1982;**284**:942

2 Peturrson H, Lader M. *Dependence on Tranquillizers*. Oxford: Oxford University Press, 1984

3 Lader M, Lawson C. Sleep studies and rebound insomnia: methodological problem, laboratory findings and clinical implications. *Clin Neuropharmacol* 1987;**10**:291–312

4 Ogunremi OO, Adamson L, Brezinova V, *et al*. Two anti-anxiety drugs: a psychoneuroendocrine study. *BMJ* 1973;2:202–5

5 Wilson GT. Alcohol and anxiety. *Behav Res Ther* 1988;**26**:369–81

6 Cowen PJ, Nutt D. Abstinence symptoms after withdrawal of tranquillizing drugs: is there a common neurochemical mechanism? *Lancet* 1982;ii:360–2

7 Lishman WA. Alcohol and the brain. *Br J Psych* 1990;**156**:635–44

8 Tyrer P, Rutherford D, Hugget T. Benzodiazepine withdrawal symptoms and Propranolol. *Lancet* 1981;ii:520–2

9 Royal College of Psychiatrists. *Alcohol Our Favourite Drug*. London; New York: Tavistock Publications, 1986:87–8

10 Smail P, Stockwell T, Canter S, Hodgson R. Alcohol dependence and phobic anxiety states: I. A prevalence study. *Br J Psych* 1984;**144**:53–7

11 Stockwell T, Smail P, Hodgson R, Canter S. Alcohol dependence and phobic anxiety states: II. A retrospective study. *Br J Psych* 1984;**144**:58–63

12 Samarasinghe DS, Tilley S, Marks IM. Alcohol and sedative use in neurotic outpatients. *Br J Psych* 1984;**145**:45–8

13 Ashton H. Benzodiazepine withdrawal: an unfinished story. *BMJ* 1984;**288**:1135–40

(Accepted 27 August 1993)