FEATURE

Alcohol dependency syndrome

■ Alcohol is a primary toxin that contributes significantly to medical, psychological and social disease and disorder. The aim of this paper is to raise the awareness of therapeutic options in the management of alcohol abuse.

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In the experience of those who work in the field, alcoholism is the great imitator, now replacing syphilis. I have used the words 'alcoholic' and 'alcoholism' rather than terms such as alcohol addiction, alcohol dependency, problem drinkers and hazardous drinkers, as general terms for simplicity of reading. In fact 'alcoholic' and 'alcoholism' are emotive terms and should be avoided clinically due to their negative connotation.

We see people presenting with a broad range of ailments, some of which are listed in *Table 1*.

The following case study illustrates the importance of taking a history of alcohol ingestion.

A 36 year old, married man, employed in one of the State's emergency services, spent 6 weeks as an inpatient in a major teaching hospital in Melbourne.

He had suffered a cardiac arrest after an episode of influenza. The diagnosis made was myocarditis associated with a viral illness. He presented to me in a drunken stupor with a blood alcohol reading over 0.2 only 2 weeks after hospital discharge.

A review of his previous hospital investigations showed that he had an abnormal liver function with a raised gamma–GT over 200, his mean corpuscular volume was over 100, the blood film showing macrocytosis, and his triglycerides were 2.7. These results are elevated above the normal range. He was not given thiamine supplements nor did anyone suspect his primary illness. In retrospect, the cardiologist redefined his diagnosis as alcoholic cardiomyopathy possibly complicated by viral myocarditis.

Definitions

An 'alcoholic' is a person who demonstrates preoccupation with using alcohol to the point of producing substantial continuing or recurring interference with the major life areas — especially family, work or health.[1]

The American Medical Association's handbook [2] points out that not all alcoholics are solitary drinkers nor do all begin each day with a drink. Many alcoholics drink on a daily basis; others are 'spree' drinkers who become grossly intoxicated only on occasions and may be virtually abstinent in the intervening periods.

Likewise, and contrary to popular belief, a number of alcoholics never experience the physical or sociological changes regarded as inevitable sequelae of severe alcoholism.

Blood alcohol levels that constitute heavy or hazardous drinking will vary with individual, sex, and target organs affected. Hazardous drinking leading to cirrhosis is represented by six to eight standard drinks a day in males and three to six drinks a day in females, and 20 to 40 g a day will lead to brain injury.[3] Alcohol is metabolised at a rate of 8 to 10 g per hour. There is about 10 g to the average drink if served in traditional sized glasses. The rate, frequency, association with food intake, type of beverage, general health, and tolerance are some factors that will influence the degree of hazardous effects.

Causes

These are multi-factorial and it is useful to think of them under the following headings:

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TABLE 1

Harmful effects of alcoholism

Physical	Psychological	Social
Hypertension	Insomnia	Financial
Hyperlipidaemia	Irritability	Marital
Liver disease	Depression	Accident prone
Pancreatitis	Memory loss	Incest
Gastritis	Anxiety	Child abuse
Gout	Phobias	Driving offences
Cardiac dysfunction	Paranoia	Criminal offences
Skin problems	Psychoses	
• eczema	Cognitive impairment	
• urticaria	Loss of judgment	
Nutritional problems		
Neurological disorders		
Impotence		

Physiological factors:

A genetic predisposition
Physiological tolerance and withdrawal effects on central nervous system.

Psychological factors

Lack of coping skills
Inappropriate response to stress.

Social factors:

Cultural attitudes and behaviour
Family attitudes and level of function
Socioeconomic status
Peer group pressure
Impact of advertising
Licensing laws
Pricing and availability.

Alcoholics need to face their alcohol abuse directly and separately from the treatments they receive for their medical, psychological and social problems.

There are a number of myths about alcoholics that are unhelpful to the recovery process and have contributed to misunderstanding the nature of the disease. For example:

- All alcoholics are tramps ... (less than 5% are on skid row)[4]
- All alcoholics are from lower socioeconomic groups ... (10 to 20% of professional and managerial groups drink alcohol hazardously)[5–8]
- Relapse means absolute failure ... (untrue)
- All alcoholics are the same ... (there are various profiles of alcohol abuse–misuse)
- Tranquillisers are safe alternatives ... (they are cross addictive and potentiate the chemical hazards)
- Loss of control constitutes sin, weakness, punishment, and failure ... (these ideas are counter–therapeutic)
- There is a addictive personality ... (not proven)

Interventions

There is much debate in the literature about what constitutes effective intervention and whether inpatient or outpatient programmes are superior.

There is evidence that the following criteria produce better outcomes:

1. married or in a stable relationship;
2. vocationally employed;
3. concurrent–conjoint participation of spouse in counselling;
4. straightforward educational activities are far better than insight oriented psychotherapy;
5. the therapist rather than the therapeutic school is more important:
   - the apparent competence of the therapist
   - the apparent trustworthiness–rapport with the therapist.

The following appear to improve outcome but are not proven:

- involvement in Alcoholics Anonymous
- involvement in multi–couple groups
- middle–upper classes
- Disulfiram (antabuse) is useful for some by providing a 72 hour cooling off period prior to drinking alcohol.

Early intervention shows better outcome in terms of sobriety and marital cohesiveness.

Expectations may create new and different outcomes and interpretations.

There is sufficient evidence in the psychosocial literature to show that conducting an adversarial debate is not an effective way to influence an individual to make a decision. In such an intervention the doctor–therapist presents an array of facts that are critical or are detrimental to the self–esteem or self–concept of the patient.

Many problem drinkers manifest denial. Denial is an unconscious defence mechanism. It is not a deliberate attempt to be difficult.

The emphasis in interviewing should be to encourage dialogue in which the patient, not the doctor, must put a case for the existence of the alcohol problems, rather than the reverse. It is not useful to confront the denial. It is more useful to offer the patient hope and positive reframing.

Patients are more likely to respond appropriately if the truth of their danger is shared with them. But rather than warning them of their imminent death,

TABLE 2

The AUDIT (Alcohol Use Disorders Identification Test)*

The Audit Questionnaire:

1. How often do you have a drink containing alcohol?
   (0) never, (1) monthly or less, (2) 2–4 times per month, (3) 2–3 times per week, (4) 4 or more times per week.
2. How many drinks containing alcohol do you have in a typical day when you are drinking?
   (Code number of standard drinks at 10 g per standard drink.)
   (0) 1–2, (1) 3–4, (2) 5–6, (3) 7–9, (4) 10 or more.
3. How often do you have six or more drinks on one occasion?
   0) never, (1) less than monthly, (2) monthly, (3) weekly, (4) daily or almost daily.
4. How often during the last year have you found that you were not able to stop drinking once started?
   (0) never, (1) less than monthly, (2) monthly, (3) weekly, (4) daily or almost daily.
5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (0) never, (1) less than monthly, (2) monthly (3) weekly, (4) daily or almost daily.
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   (0) never, (1) less than monthly, (2) monthly, (3) weekly, (4) daily or almost daily.
7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (0) never, (1) less than monthly, (2) monthly, (3) weekly, (4) daily or almost daily.
8. How often during the last year have you been unable to remember what happened the night before because you have been drinking?
   (0) never, (1) less than monthly, (2) monthly, (3) weekly, (4) daily or almost daily.
9. Have you or someone else been injured as a result of your drinking?
   (0) No, (2) Yes, but not in last year, (4) Yes, during last year.
10. Has a relative, a friend or a doctor or other health worker, been concerned about your drinking or suggested you cut down?
    (0) No, (2) Yes, but not in last year, (4) Yes, during last year.

A score of more than 8 qualifies a positive case.
High scores in the first three items suggest hazardous alcohol use.
Elevated scores in items 4–6 imply dependency or emergence of dependency.
High scores on items 7–10 suggest harmful alcohol use.

*The procedure was devised by the World Health Organisation to identify persons whose alcohol consumption has been identified as hazardous or harmful to the health. The Audit has three parts: (i) Audit Questionnaire; (ii) the Trauma History; (iii) the clinical examination.

they should be given the goal of maintaining their health through sobriety.

Relapse needs to be interpreted as a temporary hiccup rather than a failure. It should not be presumed in telling patients to cease or reduce alcohol consumption that it is something they can do unassisted. Most will struggle due to the physical or psychological addiction, or both. Even if they have the will, they may be discouraged by their family, friends and colleagues from accepting the diagnosis of 'alcoholism'.

It is, after all, one of the few shames left to western man.

Motivation

Disenchanted doctors argue that 'alcoholics' lack motivation.

It is typical and the hallmark of addictive behaviour to select short term rewards over long term adverse consequences.

Motivation is not the stuff that the doctor or therapist pours into the patient. Their responsibility is to influence the patient to resolve to abstain from alcohol or reduce intake to a safe level.

Initial assessment

- Go slow. To be of value one must establish rapport and demonstrate expertise.
- Introduce questions into interview in a casual way. Suitable questionnaires are CAGE,[9] AUDIT[10] or MAST[11] *(Tables 2–4)*.
- Suggest the possibility of alcohol toxicity (not addiction).
- Suggest confirmation by blood tests.
- Focus on recovery with abstinence (rather than death or disease with further use).
- Enlist the spouse (or partner) to attend at review in order to explain the patient's problems to him or her.
- Suggest a reduction of intake. Be specific as to quantities. It may require a little bargaining to agree to the amount to be consumed a day until the next visit.
- Ascertain level of complications.
- Determine if profile suggests a pattern of dependency.
- For patients with severe complications or severe intoxication or withdrawal, hospitalisation for acute detoxification may be appropriate.

Management

Alcoholism is a family disease. It is therefore important to involve the whole family in the treatment. The enabling behaviour of family and friends requires specific education. The enabler needs to learn to stop protecting, stop trying to take responsibility, stop inviting sobriety, stop accepting abuse, and so on.

Education is important. Taking responsibility requires an understanding of the physical and psychological effects of alcohol.

AA (Alcoholics Anonymous), Alanon

TABLE 3

CAGE test*

1. Have you ever felt you should cut down on your drinking?
2. Have people annoyed you by criticising your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hang-over?

Two positives suggest alcohol dependence.

* Mayfield D, McLeod G, Hall P. The CAGE questionnaire: validation of a new alcoholism screening instrument. Am J Psychiatry 1974; 131(10):1121-1123.

TABLE 4

Brief MAST*

Do you feel you are a normal drinker? (n=2)
Do friends and relatives think you are a normal drinker? (n=2)
Have you ever attended a meeting of alcoholics anonymous? (y=5)
Have you ever lost friends, boy friends or girl friends because of drink? (y=2)
Have you ever got into trouble at work because of drinking? (y=2)
Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking? (y=2)
Have you ever had delirium tremens (DTs), severe shaking, heard voices or seen things that were not there after heavy drinking? (y=5)
Have you ever gone to anyone for help about your drinking? (y=5)
Have you ever been in hospital because of drinking? (y=5)
Have you ever been arrested for drunken driving or driving after drinking? (y=2)

A score of five or more points is said to be diagnostic.

*Pokorny A D, Miller B A, Kaplan H B. The brief MAST: a shortened version of the Michigan Alcoholism Screening Test. Am J Psychiatry 1972;129(3): 342-345.
(The Michigan Alcoholism Screening Test originally designed by M L Selzer. Am J Psychiatry 1971; 127(12):1653-1658.)
n = no y = yes

(for the spouse), Alateen (for the children), and a couple's support group are important to enhance the likelihood of successful outcome.

It is also important to separate the goal of sobriety from other psychotherapeutic goals. Sobriety is not a by-product of psychotherapy. It needs to be emphasised that alcoholism is a multifaceted monster. And each facet must be confronted separately.

One has to beware of cross addiction that is common with minor tranquillisers and sedative hypnotics. It is appropriate to utilise these drugs in early detoxification but they should be ceased early, usually within 2 to 4 weeks.

Determine the goal of intervention. It is usually helpful to aim for a period of sobriety in which to manage and stabilise complications.

It is important to emphasise that total sobriety should be the goal for all persons with:

- alcohol dependency
- severe medical complications
- severe psychiatric complications

'Losing' the patient after the first interview will not achieve that goal.

For patients with an urgent need to cease drinking abruptly due to complications and for those with alcohol dependency syndrome who are drinking heavily it may be appropriate to hospitalise the patient for supervised detoxification, the regimen for which is not within the scope of this paper.

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