Treatment of alcohol dependence

Abstract

It is important to manage alcohol withdrawal properly. Mismanagement could lead to permanent brain damage or even death. The principles are simple and easily learnt. New pharmacological agents have come into use which helps in maintaining abstinence. Clinicians should update themselves on their use.

Introduction

The symptoms of alcohol withdrawal can range from mild to life threatening. Though withdrawal is best managed in an inpatient unit, suitable patients could be managed on an outpatient basis [1].

Panel 1. **Relative indications for inpatient alcohol detoxification** [1]

- History of severe withdrawal symptoms
- Multiple past detoxifications
- History of alcohol withdrawal seizures or delirium tremens
- Concomitant medical or psychiatric illness
- Recent high levels of alcohol consumption
- Lack of reliable support network
- Pregnancy

The symptoms of alcohol withdrawal are variable in type and severity. They occur within hours of the last drink and peak within 24-48 hours.

Panel 2. **Symptoms and signs of acute alcohol withdrawal** [2]

Anxiety, agitation and insomnia

Tachycardia and sweating

Tremor of limbs, tongue and eyelids

Nausea and vomiting

Seizures

Confusion and hallucinations

In most individuals the symptoms of withdrawal are mild to moderate and do not last beyond a week. In about 5% it could lead to delirium tremens (DTs). DTs present insidiously with nocturnal confusion. If not treated promptly it carries a mortality of 1-2% [3].

Panel 3. **Symptoms and signs of delirium tremens** [3]

Confusion and disorientation

Agitation

Tachycardia and hypertension

Fever

Visual and auditory hallucinations

Paranoid ideation

Pharmacological treatment of alcohol withdrawal

Drug treatment is most useful in moderate to severe withdrawal. Many drugs have been used but mainstay of therapy is the use of a benzodiazepine. A withdrawal scale is useful in assessing severity of withdrawal. This minimises over or under dosing. The Clinical Institute Alcohol Withdrawal Assessment Scale, Revised (CIWA-Ar) is a ten item scale which can be completed in five minutes [4]. A long acting benzodiazepine such as chlordiazepoxide or diazepam is more effective in preventing seizures and DTs but a short acting benzodiazepine such as lorazepam or oxazepam is safer in those with liver failure.

Use of benzodiazepines

Benzodiazepines could be given in several different ways. In a flexible dose regime the dose is determined according to the symptoms. This is suitable in a unit where the nursing staff are trained to detect withdrawal symptoms. A fixed interval tapering dose regime is more practical in a general ward regime.

A regime suitable for an individual with moderate alcohol dependence is given below. A person with severe alcohol dependence would need higher doses (for e.g. 40 mg qds on day 1) and is best managed in a specialised unit. A stat dose of chlordiazepoxide 40 mg to 80 mg would be useful in such people. Chlordiazepoxide may be discontinued in the majority after one week.

Panel 4. **Chlordiazepoxide regime for an individual with moderate alcohol dependence**

Day 1	20 mg qds
Day 2	15 mg qds
Day 3	10 mg qds
Day 4	5 mg qds
Day 5	5 mg bd