

Other Drugs

THERE are some substances not covered in earlier chapters that are used in non-medical contexts. These drugs do not share a common pharmacology or pattern of effects and are used for different purposes in a variety of contexts. They include:

- hallucinogens
- 'party drugs'
- anabolic steroids
- over the counter drugs

It is important that use of non-prescription and complementary medicines is included in any drug use screening program.

HALLUCINOGENS

While a range of drugs have potential to produce hallucinations (e.g. cannabis, amphetamines), the label 'hallucinogenic' indicates that this is the major purpose for which the drug is consumed. These drugs are normally administered orally, on an irregular basis. Harms are likely to arise from acute drug effects (especially behavioural and psychiatric sequelae) rather than regular or dependent use.

The most common hallucinogens include:

- lysergic acid diethylamide (LSD or acid)
- magic mushrooms (containing psilocybin and other active compounds)
- anticholinergics (pharmaceuticals and plant sources e.g. datura, angels' trumpet)

Physical and Psychological Effects

The irregular use of hallucinogens means that most problems that arise are due to acute toxicity. While the exact symptoms vary, a common presentation is a person who is actively hallucinating, and is disturbed by the experience.

This can result from:

- an overdose (the strength of effect is greater than the person is accustomed to); or
- a 'bad trip' (the experience has become dysphoric rather than euphoric)

Management and Intervention

Agitation and feelings of panic and loss of control may be prominent. The best response is to try and calm and reassure the person. A quiet, non-threatening environment is important. If this is not successful, administration of a benzodiazepine (e.g. diazepam) may be required.

In isolated cases the symptoms do not completely subside when the drug effect has ceased. Some patients report daily recurrence of the unpleasant episode and may need psychiatric referral.

Other signs and symptoms depend on the drug consumed. LSD and psilocybin produce sympathomimetic effects including tachycardia, tremor, hyperreflexia. These are not usually problematic, but can be if the person has overdosed. Anticholinergic overdose is life-threat-

ening and the effects may persist for many hours and even days. Physostigmine has been used, but treatment is usually conservative.

PARTY DRUGS

Party drugs is a term used to describe substances taken in the context of 'raves', night-clubs or similar situations. Two of the main party drugs, amphetamines and ecstasy, have been discussed in earlier chapters in this Handbook.



See Chapters 6 & 7
Amphetamines; Ecstasy

Other drugs used as party drugs include:

- LSD (see above)
- GHB (gamma hydroxybutyrate)
- ketamine

Party drugs (sometimes known as '*club drugs*' or '*dance drugs*') are frequently taken in combination with other drugs, including alcohol. This practice increases the risk of intoxication, overdose and other harms.



See Chapter 1
Overview and Introduction
'Polydrug Use', p. 5



GHB

Gamma hydroxybutyrate (GHB) is a clear, odourless and fairly tasteless powder usually taken in the form of a solution.

Street names include:

- liquid ecstasy
- fantasy
- GBH (grievous bodily harm)

GHB occurs naturally in some mammalian cells and is structurally similar to gamma aminobutyric acid (GABA). A synthetic form was initially developed as a hypnotic agent and is easy to manufacture.

Physical effects

GHB is absorbed rapidly and reaches peak plasma concentrations in 20–60 minutes.

Common effects include:

- placidity
- mild euphoria
- pleasant disinhibition

Unpleasant side effects may include:

- drowsiness
- dizziness
- nausea
- vomiting

GHB has a steep dose response curve and consequent narrow therapeutic index. There is wide interpersonal variation in tolerance and metabolism. It is easy to overdose. Adverse effects usually subside within 12 hours.

Detection and assessment

GHB is very difficult to detect or measure in body fluids. Taking an oral history is the best method for assessing GHB use.

Management and intervention

In milder cases of intoxication, supportive treatment ensuring adequate respiratory function should be provided.

GHB overdose is a real danger, usually occurring within 15–20 minutes of ingestion. Most fatalities associated with GHB occur when it is taken with other substances, most notably alcohol. It may present as:

- nausea and vomiting
- seizures
- aggressive outbursts
- respiratory depression
- coma

Table 12–1 outlines the features of the management of GHB intoxication, as described by McDowell (1999).

Ketamine

Ketamine is a dissociative anaesthetic and n-methyl-d aspartate (NMDA) receptor antagonist. It has recently become popular amongst party drug users. It may be sold as ketamine or as a constituent of pills sold as 'ecstasy'.

Its street names include:

- K
- super K
- vitamin K
- special K

Ketamine is usually snorted but may also be injected or taken orally.

Physical effects

Ketamine has a rapid onset but short duration (1–2 hours) of action. Dosage titration is difficult and the effects are highly sensitive to setting.

Table 12-1
Management of GHB intoxication

For spontaneously breathing patients:

1. Maintain oxygen supplementation and intravenous access
2. Maintain comprehensive physiological and cardiac monitoring
3. Attempt to keep the patient stimulated
4. Use atropine for persistent symptomatic bradycardia
5. Admit the patient if he or she is still intoxicated after 6 hours
6. Discharge the patient if he or she is clinically well in 6 hours

Patients whose breathing is laboured should be managed in an intensive care unit.

- 'bad trips' (known as the 'K hole')
- nausea and vomiting (especially if taken with alcohol)
- tachycardia
- chest pain
- hypertension
- temporary paralysis
- analgesia and sensory dissociation thereby creating a high risk of accidental injury
- coma

Ketamine can create dependency in some individuals (McDowell, 1999, p. 301).

Management and intervention

Most clinical presentations are short lived and require symptomatic relief and observation. An environment with low lighting and stimulation should be provided. Levels of patient anxiety should be closely monitored.

Ketamine can cause:

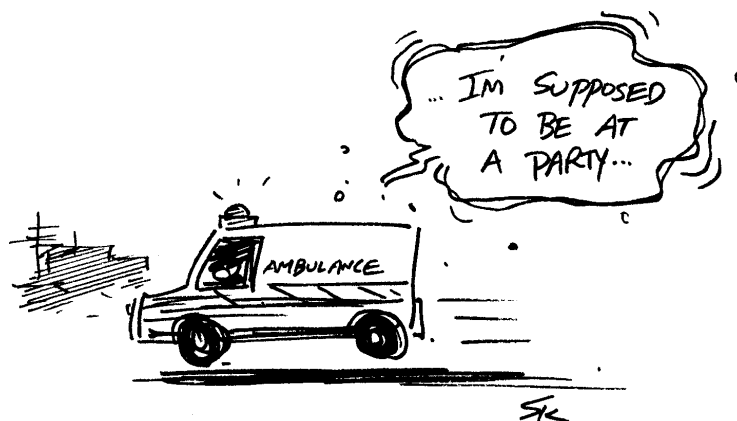
- thought disorders, out of body experiences, aphrodisiac effects, hallucinations and other perceptual distortion (psychedelic effects)
- stimulant effects

Adverse effects can include:

- anxiety
- agitation

ANABOLIC STEROIDS

Anabolic steroids are synthetic variations of the male sex hormone testosterone. Traditionally, they have been associated with enhancing sporting performance but are now widely used for cosmetic reasons to modify body shape. Anabolic steroid use is currently dominated by males but a growing number of women use these drugs.



They are primarily taken orally or by intramuscular injection, generally in cycles with a period of use followed by a period of abstinence. The length of a cycle can vary widely but an average would be 6 to 8 weeks with a small number of people using continuously.

Anabolic steroids are commonly used in 'stacks', that is, a number of anabolic steroids or other drugs are taken at the same time.

A vast array of side effects have been associated with anabolic steroids. These range from relatively minor cosmetic changes such as acne, lowering of the voice and baldness to potentially life threatening complications involving the cardiovascular system, liver and kidneys.

OVER THE COUNTER DRUGS

A number of over the counter drugs have psychoactive effects. Drugs in the following medication groups can cause concern:

- analgesics
- antihistamines
- sympathomimetics
- cough suppressants

Non-prescription Medication

Few data are available on the extent of intentional misuse of non-prescription pharmaceuticals. However anecdotal accounts (and some monitoring by State authorities) indicate cause for concern in the following medication groups:

Analgesics

Paracetamol, codeine

Concern for codeine-containing products:

- codeine is an opioid and can be used to make home-bake heroin
- need to be aware of the potential for abuse and sale as a street drug

- abuse of paracetamol/codeine/doxylamine succinate combinations, i.e. analgesic plus antihistamine

- combination products (e.g. codeine plus paracetamol) increase the likelihood of hepatic damage from high dose paracetamol

Antihistamines

Chlorpheniramine, dexchlorpheniramine, diphenhydramine, pheniramine, promethazine hydrochloride, trimeprazine

- used alone or in combination with analgesics or sympathomimetics. There is little therapeutic justification for these combination products and recommendation should be avoided
- use of older style antihistamines for sedative effects
- the combination with alcohol increases sedation
- paradoxical stimulation, including hallucinations, can occur, particularly at higher doses

Sympathomimetics

Pseudoephedrine, phenylpropanolamine, phenylephrine

- potential for misuse by people dependent on stimulants
- high potential for diversion into manufacture of amphetamines
- concern for use in pregnancy
- overdose causes tachycardia, palpitations, and more rarely arrhythmias and seizures

Cough suppressants

Codeine, dihydrocodeine, dextromethorphan, pholcodeine

- often available in combinations with antihistamines and many other drugs

Injecting Drug Users

Dose form is cause for extreme caution; in particular requests for liquid preparations (e.g. cough and cold mixtures) or preparations in soft gelatin caps (e.g. diphenhydramine gel caps, ibuprofen/codeine gel caps).

Other

Anecdotal reports of experimentation with use of a wide range of products including eye drops and complementary medicines are not uncommon.

REFERENCES

McDowell, D.M. 1999, 'MDMA, Ketamine, GHB and the "Club Drug" Scene', cited in Galanter, M. & Kleber, H.D. (Eds.) 1999, *Textbook of Substance Abuse Treatment*, 2nd Edn., American Psychiatric Press, Washington D.C., p. 301.

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