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The Authors and purpose of this booklet

The booklet is called
“Guide to home Detoxification”

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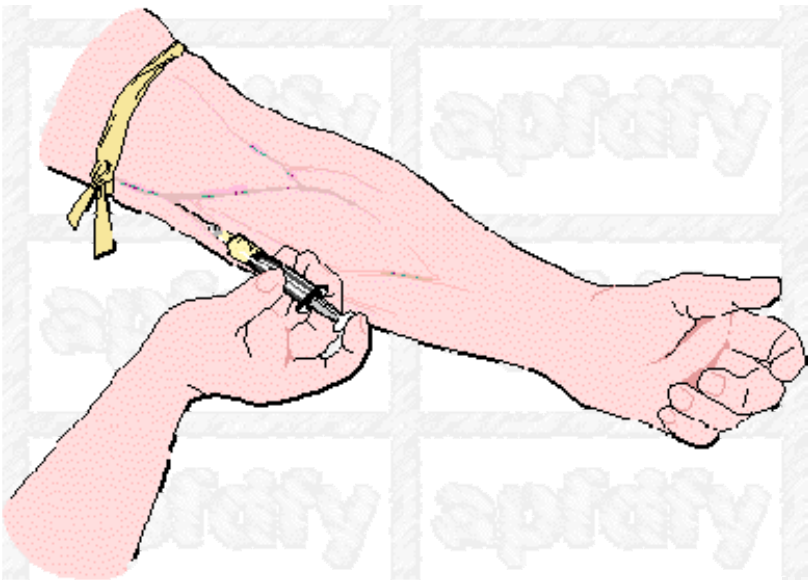
Many of the patients who present to the doctor's surgery have an alcohol or other drug problem. One of the most common tasks that the doctor faces is a need to detoxify these patients. In many cases it is not appropriate or possible to refer the patient to a detoxification service. In such instances, the patients can be detoxified in their own home, under the supervision of their doctor.

This publication is designed to provide a brief clinical guide for medical practitioners and nurses who need to supervise detoxification of their patients in a home setting. It covers the management of detoxification from alcohol, benzodiazepines and opiates. The text focuses on treatment of withdrawal. Long term management, e.g. rehabilitation, is not discussed beyond information about organisations that provide such services.

Most patients do not need to be hospitalised for their withdrawal (Feldman et al., 1975; Sauser et al., 1982; Bums et al., 1983; Pedersen, 1986. Tennant, 1986; Alterman et al., 1988; Abramowitz, 1989; Hyashida et al., 1989; Spencer & Gregory, 1989; Stockwell et al., 1990 Stockwell, 1992). They can be safely detoxified in their home environment. Utilisation of home detoxification has a number of benefits. It is a preferred option for the majority of patients. They are more willing to undergo detoxification if they do not need to be hospitalised. The ambulatory detox approach makes detoxification services accessible to a broader range of people, e.g. isolated rural population, women with child care responsibilities. Other potential benefits include greater

confidentiality, less stigma, retention of contact with family and friends, continuity of care by the family doctor .



Prerequisites for

home detoxification

With the decision whether to detoxify the patient in a home or hospital setting, a number of factors need to be considered. To

ensure that home detoxification is safe and effective, five essential conditions need to be fulfilled. They are described below:

Prerequisites for home detoxification TABLE 1

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1 Patient wishes to detoxify and to comply with the doctor's instructions (e.g. not to take medications other than those prescribed, and not to consume any alcohol).

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2 Home supervision (e.g. a sensible / reliable relative or friend) is available.

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3 No concurrent physical or psychiatric disorder that may be exacerbated by the withdrawal process. Severe withdrawal or that complicated by other factors may have to be treated in inpatient facilities.

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4 Patient is expected to experience only a mild to moderate withdrawal (e.g. presenting symptoms are mild and there is no previous history of severe withdrawals or delirium tremens).

5 Doctor is available and committed to the supervision of the patient during the withdrawal.

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1 Patient's agreement and compliance with treatment

Compliance is essential when detoxifying patients in their own home. The patient needs to express a clear desire to detoxify from alcohol / benzodiazepine / opiates. Alternatively, the patient needs to be convinced that detoxification is essential for medical reasons, and agree to comply with the doctor's instructions.

It must be appreciated that self medicating is often a part of the lifestyle of persons with drug and alcohol problems. It is essential to warn patients that continuing alcohol or drug use, while being treated for withdrawal, is unacceptable as it may jeopardise their lives. The patient needs to understand that only the medications prescribed by the doctor are to be taken. Any other drugs / medication / alcohol must not be taken because of the danger of overdosage, or drug interactions.

Some doctors are satisfied with a verbal agreement from the patient, others prefer to obtain a written contract. The contract should be signed by the patient, patient's carer, the doctor and other health professional involved in the management of the detoxification, e.g. a nurse. An example of such a contract is reproduced in Appendix A.

If the terms of the contract are breached, for example, when the patient continues alcohol or heroin use while being treated for withdrawal, the doctor should consider termination of treatment.

The patient should be adequately equipped with information to enable the detoxification process to be carried out safely He/she needs to know the expected symptoms and their severity, duration of withdrawal, any danger signs that require immediate medical attention e.g. seizures, delirium tremens. The patient also needs to know what to do in an emergency The doctor might consider providing the patient with a letter intended for the emergency department staff in case the patient needs to attend there. Such a letter should include relevant brief details including history of drug and alcohol intake, record of past withdrawals, date of commencement of the detoxification and any medications prescribed.

The patient may consider the detoxification process to be the first step towards prolonged abstinence from drugs or alcohol. The doctor should be aware of longer term treatment options. In some cases the doctor may wish to take on the role of therapist and provide the patient with counselling and advice. Where the doctor is unable to do so, he/she needs to offer a referral to appropriate services instead. Drug and alcohol services and access to them are discussed in the last chapter.

2 Home supervision

The availability of home supervision is essential. It needs to be provided by a sensible and reliable person. Ideally, this person would be available to be with the patient most of the time. Persons who also have alcohol or other drug related problems are not considered suitable for this role. Availability of alcohol or drugs at home could pose an irresistible temptation to the patient who is

detoxifying. Moreover, an intoxicated carer may not be able to enforce the doctor's instructions.

Like the patient, the carer needs to receive sufficient information to recognise when the withdrawal reaches the severity that requires immediate medical attention. The carer also needs to understand the medication regime and recognise the necessity for cessation of alcohol or other drug use for the duration of the detoxification.

The doctor may wish to obtain a written contract outlining the carers' responsibilities. An example of such a contract is reproduced in Appendix B.

3 Physical and psychiatric contraindications

A number of conditions, e.g. unstable diabetes, severe hypertension, or severe liver disease, would necessitate an inpatient withdrawal with more intensive monitoring and treatment. These conditions adversely affect the course of withdrawal and its treatment while, conversely, withdrawal aggravates these illnesses.

The presence of a psychiatric illness can complicate withdrawal management. Many persons with psychiatric disorders have difficulty in complying with medication regimes. Coexisting psychiatric illness can also intensify some symptoms of

withdrawal, e.g. agitation, confusion. Another problem can arise when psychiatric patients use alcohol and other drugs to relieve the symptoms of the psychiatric disorder. When alcohol or other drug use ceases, the original psychiatric symptoms that were suppressed and acute withdrawal can emerge simultaneously with the onset of the withdrawal syndrome.

4 Severity of withdrawal symptoms

Detoxification in a home setting is recommended only in cases of mild to moderate withdrawal. Individuals with a history of severe withdrawal and those who develop complications (e.g. seizures, delirium) need to be treated on an in-patient basis. Severe withdrawal requires full nursing and medical cover.

5 Doctor's commitment

Home detoxification requires ready access to medical advice and supervision. This necessitates a commitment from the doctor to be available for telephone advice, and for home visits. Some doctors may be able to engage a nurse to do the follow up home visits.

After the initial assessment of the patient, a date for the commencement of the withdrawal is agreed upon. This would be determined by the patient's wishes, the availability of the doctor,

stability of the home situation, and opportunity for, or convenience of leave from work.

The above five prerequisites are essential for each alcohol, benzodiazepine and opioid detoxification in a home setting. The following sections, which deal with individual drugs, provide details of specific requirements for individual drugs.

Alcohol

Description of alcohol withdrawal syndrome

The alcohol withdrawal syndrome occurs after cessation or a significant reduction of prolonged high alcohol intake. Typically, this means an intake of 80 grams (8 standard drinks[(1)]) or more on a regular daily basis.

Alcohol withdrawal is a syndrome of autonomic and central nervous system hyperactivity characterised by the following cluster of signs and symptoms:

hypersensitivity to stimulation

tremor

perspiration

increased pulse, blood pressure, temperature and respiratory rate

nausea, vomiting and diarrhoea

agitation

anxiety

insomnia

nightmares

fear

depression

seizures (usually within the first 72 hours)

disorientation

confusion

hallucinations

The presence and magnitude of each of these symptoms varies with the level of severity of withdrawal. Mild forms of withdrawal are usually not accompanied by any central nervous system signs, such as disorientation, hallucinations, etc.

Presence of concomitant illness, injury or other physical trauma, and recent surgery increases the severity of withdrawal, including delirium tremens, needs careful medical assessment and necessitates an admission to hospital.

Onset: Usually between 6 and 24 hours after the last intake of alcohol. Withdrawal may be delayed if other sedatives have been taken.

Delirium tremens typically occurs 2-6 days after the last drink and may not be preceded by signs of simple alcohol withdrawal. Such sudden, unexpected onset of delirium tremens needs to be anticipated when assessing the suitability for home detox.

Duration: Variable, between 2 and 12 days. The more severe the withdrawal the longer its duration. Because only mild to moderate withdrawal is suitable for home detoxification, the duration would be expected to take from 5-7 days.

Assessment

Predictors of the severity of the withdrawal

Estimating the severity of imminent alcohol withdrawal is of paramount importance as safe management of severe withdrawal usually requires hospitalisation. Four factors help to predict the severity of the withdrawal:

Past history of withdrawal: If the patient has experienced any withdrawals in the past, then, with cessation of alcohol intake, the patient is likely to experience withdrawal again. Similarly, previous history of severe withdrawal suggests that future withdrawals will also be severe.

Duration and amount of alcohol use: Generally, the longer, more frequent and greater the regular alcohol intake, the more likely the withdrawal. However, there does not seem to be a direct linear relationship between intake and the severity of the withdrawal.

Presence of concomitant illness, injury or recent surgery: This increases the severity of withdrawal and the likelihood of delirium tremens.

Use of other psychotropic drugs: Simultaneous use of alcohol and other CNS depressants results in additive or synergistic effects. Thus the original psychotropic effects of individual drugs are greatly enhanced.

Home situation

Is a reliable carer available for the period of detoxification?

The carer must be capable of understanding the doctor's instructions, and of following them.

The carer must be able to abstain from alcohol and make sure that alcohol is not available to the patient.

Is the home environment stable?

No major family problems, e.g. domestic tensions, other relatives requiring care.

Physical environment is quiet and comfortable.

Are any major commitments planned during the period of detoxification, e.g. a driving test?

Where possible, such commitments should be postponed till after the detoxification.

Other essential prerequisites

Once the outcome of assessment indicates that the person is suitable for home detoxification, a date for the commencement of the withdrawal can be agreed upon. When selecting the date the following determinants (as described in the first chapter) need to be considered:

Availability of doctor.

Ability to arrange time off work.

No planned major festivities which usually involve drinking, e.g. birthday or anniversary parties.

No commitments involving physical exertion or emotional stress.

During the assessment of the patient, the doctor needs to explain what is involved in home detoxification, and what will be expected of the patient and the carer. The importance of the carer's involvement and the need for a meeting between the doctor and the carer must be stressed. Patients must also be told about the expected withdrawal symptoms including the possible complications and measures they can take to alleviate them.

While awaiting detoxification, the patient should continue with a similar pattern of drinking until the night prior to the

commencement of the detoxification. The patient is advised to stop drinking the night before the agreed date for detoxification. If an immediate detoxification is necessitated on medical grounds, an alternative to home detoxification should be sought, e.g. admission to hospital or a detoxification unit.

Treatment

Commencement of detoxification

On the selected date, the patient and the carer should be seen by the doctor. This can be done by a home visit or an appointment at the surgery. During this appointment, the doctor should verify the suitability of the carer and provide clear instructions to both patient and carer.

The doctor needs to explain the medication regime and the effect that the medication will have on the patient. The dangers of combining alcohol with such medication should be stressed.

The emergency procedure is explained to the patient and their carer. The emergency procedure should contain at least these elements.

Elements of emergency procedure

Recognition of symptoms that should cause concern and warrant contacting the doctor.

Clear statement of how to contact, e.g. when is he/she available in surgery; how to contact him/her after hours; and who else can be contacted when the doctor is not immediately available.

Location of nearest suitable Accident and Emergency Department. Nomination of a preferred A & E department allows the doctor to liaise with hospital staff and advise them about the correct procedures for withdrawal management.

At this stage the contracts would be signed and an adequate medication regime is instituted.

Principles of pharmacological therapy

Sedation

The mainstay of pharmacotherpy is an appropriately tailored regular dose of diazepam. Diazepam ("Valium", "Ducene", "Antenex") is a benzodiazepine, which shows considerable cross-tolerance with alcohol. As well as providing a suitable level of sedation, it has anticonvulsant properties, which is advantageous given that 2-3% of persons in alcohol withdrawal experience fits. Diazepam should be commenced when:

The person undergoing detoxification has returned home, and the carer is present. It is hazardous to commence sedative drugs while the person is attending a general practice or a drug and alcohol service, and especially if they have to transport themselves over long distances.

At least six hours have elapsed since the last drink of alcohol. Alcohol and benzodiazepines are central nervous system depressants, and a potentially dangerous interaction may occur if diazepam is commenced while blood alcohol levels are still high.

The patient is starting to experience symptoms of alcohol withdrawal. At least half of alcohol dependent persons, even those with a history of previous withdrawal syndrome, will not experience a clinically significant withdrawal when they stop drinking.

A suitable starting dose for the person of average weight is 10 mg diazepam every six hours. This can be supplemented by an additional 10 mg in between the first two doses. The dose should be maintained for the first two days, and then reduced in stepwise amounts over the next four days. A typical regime on day three and day four would be 5 mg, 5 mg, 5 mg and 10 mg at six-hourly intervals. On the last two days the regime drops to 5 mg twice per day. Every effort should be made to resist further prescribing of benzodiazepines because of the dependence forming potential, especially alcohol dependent persons.

TABLE 2 Diazepam regime

6 am	12 mid-day	6 pm	12 midnight
Day 1	10 mg *	10 mg	10 mg
Day 2	10 mg	10 mg	10 mg
Day 3	5 mg	5 mg	10 mg
Day 4	5 mg	5 mg	10 mg
Day 5	5 mg	-	- 5 mg

Day 6 5 mg - - 5 mg

*** Additional 10 mg dose can be given if needed.**

This regime should be modified according to the person's weight, their physical health, age, and the response of the withdrawal syndrome to the initial doses of diazepam. If withdrawal is still prominent after the first three 10 mg doses of diazepam, it may be appropriate to give an additional 10 mg between the third and fourth dose. However, this must be done cautiously and consideration given to arranging admission for inpatient detoxification. If the patient is heavily sedated, diazepam should be ceased, and recommenced only if, and when, a withdrawal syndrome becomes apparent again.

A careful check should be made to exclude physical conditions which represent a contraindication to the usual benzodiazepine regime. These include liver disease (cirrhosis) where there are signs of hepatic decompensation, and chronic airways disease to the extent that the person is unable to climb two flights of stairs without becoming breathless, or has been hospitalised with respiratory failure.

Vitamins: Everyone undergoing alcohol detoxification should be prescribed thiamine (vitamin B_1) as prophylaxis against the development of Wernicke's encephalopathy. An intramuscular dose of 100 mg should be given at the commencement of detoxification, and an oral dose of 100 mg three times per day

prescribed for the next four days. An oral multivitamin preparation should be given in addition.

Anti-convulsants: There is no general indication to prescribe anticonvulsants such as phenytoin ("Dilantin") or carbamazepine ("Tegretol") for patients undergoing alcohol detoxification. If patients have been taking them regularly, they should be continued at the usual dose (as long as there are no signs of anticonvulsant toxicity).

Withing 24 hours of the commencement of detoxification the doctor or nurse should visit the patient to check that the withdrawal is unproblematic. After the first four doses of diazepam (40 mg in total) the patient should feel more settled. The severity of the presenting withdrawal can be assessed with the aid of an Alcohol Withdrawal Scale (AWS). The chart, which is reproduced in Appendix C, is an excellent tool for monitoring alcohol withdrawal. Mild withdrawal is indicated by the score between 1 - 4, moderate to severe by scores of 5 - 14, and very severe by score of 15 or more (Saunders, 1989). Alternatively, the list of signs and symptoms of withdrawal can be used as a checklist.

The result of this assessment will indicate whether the patient can remain at home or needs to be admitted as an inpatient. If the patient is markedly unsettled, or, where AWS is used and the total score reaches 6, the patient needs fully supervised care. Admission to a hospital or a specialised clinic should be sought.

In cases of mild, uncomplicated withdrawal one visit may be sufficient, with further reliance upon telephone contact with patient and the carer. Some patients, however, may require daily visits until the completion of the withdrawal.

Benzodiazepines

Description of withdrawal syndrome

Daily use of even therapeutic doses of benzodiazepines, for longer than 4 weeks has been reported to result in physical dependence. Withdrawal syndrome occurs after sudden cessation of a large reduction in regular benzodiazepine use.

Onset of withdrawal will depend on the half-life of the particular drug. Withdrawal starts to emerge once the duration of the half-life has elapsed since the last dose was taken. Thus, the shorter the half-life of a particular drug, the quicker the onset of withdrawal. Withdrawal from short acting benzodiazepines is more severe than withdrawal from long-acting benzodiazepines.

Duration of withdrawal ranges from two to four weeks. Some symptoms (e.g. anxiety, depression, perceptual disturbances) may persist beyond this time.

The withdrawal syndrome is characterised by the following signs and symptoms:

anxiety tinnitus

tremor insomnia

muscle twitching perceptual distortions

muscle cramps paranoia

paraesthesia convulsions

headache confusion

postural hypotension disorientation

nausea and vomiting hallucinations

fatigue

The number of apparent symptoms and their magnitude will vary with the severity of withdrawal.

Many patients were originally prescribed benzodiazepines for control of anxiety problems. Re-emergence of the anxiety is common in such patients and persists well beyond the duration of actual withdrawal.

Assessment

Assessment for suitability for a home detoxification from benzodiazepines follows the general prerequisites set out on page 4.

Half-lives of benzodiazepines TABLE 3

Alprazolam - Xanax, Kalma, Ralozam 10 - 14 hours

Clorazepate - Tranxene 50 - 80 hours*

Diazepam - Ducene, Valium, Antenex 30 - 60 hours

Flunitrazepam - Rohypnol, Hypnodorm 10 - 33 hours

Lorazepam - Ativan 10 - 20 hours

Nitrazepam - Mogadon 16 - 48 hours

Oxazepam - Alepam, Murelax, Serepax 5 - 10 hours

Temazepam - Euhypnos, Normison, Temaze 10 - 17 hours

Triazolam - Halcion 2 - 4 hours

*** Half-life of the active metabolite, to which effect can be attributed. Based on Goodman and Gilman's Pharmacological Basis of Therapeutics (1992) and MIMS Annual (1995).**

Treatment

The patient should not stop benzodiazepine use abruptly. Rather, a gradual reduction of the dose should be carried out. On an out-patient basis detoxification is usually undertaken over a number of weeks, and so the withdrawal is very mild. Because of this it may not be necessary to arrange for any time off work. To maximise patient's compliance, it is important that the rate of dose reduction is negotiated with the patient. The patient will need to see the doctor at least once a week for supervision of the withdrawal. This provides the doctor with an opportunity to titrate the dose to the severity of any symptoms. Most of the patients will require such titrations as their withdrawal symptoms do not follow a linear reduction but tend to exhibit occasional peaks.

Principles of pharmacological therapy

1 In general, benzodiazepines should not be ceased abruptly. Exceptions to this rule are when they have been taken for less than four weeks, or when only a therapeutic dose of a hypnotic has been taken.

2 To achieve the smoothest detoxification and minimise withdrawal symptoms, it is best to switch from a short-acting to a long-acting benzodiazepine (e.g. diazepam) at an equivalent dose (see Table 4).

3 If the patient is well known to the doctor and one can be confident about their usual dosage, switch to the equivalent dose of diazepam. If there is doubt, give half the equivalent dose of diazepam. Diazepam should be given in 3 - 4 divided doses per day.

4 Reduce the dose by approximately 15 - 20% at weekly intervals. Weaning may have to be slower once the diazepam dose has been reduced to 15 mg daily.

5 If withdrawal symptoms become prominent, it may be necessary to halt the weaning regime for a week, or to return to a higher dose. Every effort should be made to resume weaning once withdrawal symptoms have settled.

In some cases it is impossible to ascertain the true average daily intake of benzodiazepines. This is often due to patient's desire to secure a prescription for high dosage of benzodiazepines. Such patients report inordinately exaggerated daily intake (for example 600 mg of oxazepam per day). To ensure successful and safe detoxification, these patients should be referred to a specialist drug and alcohol service.

6 Supportive care is a useful and often a necessary adjunct to pharmacotherapy, particularly for patients who remain anxious. Appendix D contains a handout that provides information about relaxation, structured problem solving and better sleeping. It can be copied and given out to the patients. This information is reproduced from the Guidelines for the Prevention and Management of Benzodiazepine Dependence, published by Australian Government Publishing Service in 1991.

If the patient has a strong preference to remain on their original benzodiazepine and progressively reduce the dose, this can be done. However, it is often more difficult for the patient to reduce the dosage.

Benzodiazepine dose equivalents TABLE 4

Approximate equivalent

Drug dose to 5 mg diazepam

Alprazolam - Xanax, Kalma, Ralozam 0.5 - 1.0 mg

Bromazepam - Lexotan 3 - 6 mg

Clobazam - Frisium 10 mg

Clonazepam - Rivotril 0.5 mg

Flunitrazepam - Rohypnol, Hypnodorm 1 - 2 mg

Lorazepam - Ativan 0.5 - 1.0 mg

Nitrazepam - Mogadon 5 - 10 mg

Oxazepam - Serepax, Alepam, Murelax 30 mg

Temazepam - Normison, Euhypnos, Temaze 10 mg

Triazolam - Halcion 0.25 mg

Based on Goodman and Gilman's The Pharmacological Basis of Therapeutics, 1991, p. 357.

Opioids

The large range of opiates and the disparate ways in which they can be used make it impossible to advocate a single effective approach to home detoxification from all the drugs in this group. For example, a doctor or nurse who becomes dependent on self-administered pethidine; a patient with chronic pain who becomes dependent on prescribed oral analgesics; and a young person who becomes dependent on heroin, may each require a different, individual therapeutic approach. This section offers an outline of management of the most frequently encountered problem - the use of heroin.

Description of withdrawal syndrome

The time of onset of withdrawal is related to the half-life of the drug. The shorter the half-life of the drug, the quicker the onset of withdrawal. For example, heroin withdrawal begins between 8 and 12 hours after the last dose. The duration of this withdrawal is about 5 - 7 days. Withdrawal syndrome is characterised by the following symptoms:

watery eyes runny nose

perspiration yawning

anxiety insomnia

dilated pupils gooseflesh

muscle aches joint pain

abdominal cramps nausea and vomiting

diarrhea hot and cold flushes

drug seeking behaviour can complicate the management.

Heroin withdrawal syndrome, while unpleasant, is not life threatening unless there is a severe underlying disease.

Assessment

Patients are selected for home detoxification according to the prerequisites listed on page 5. One of the major problems for home detoxification is that only a proportion of patients who use illicit opiates are likely to have a stable home with a suitable carer. Sometimes a drug using couple wish to detoxify together and to act as carers for each other. Such an option for carer arrangement is not recommended. While they are going through withdrawal the partners are not well enough to take on this role. In addition, these partners are likely to intensify each other's temptation to use illicit drugs. Similarly, a partner who has recently detoxified ('given up drugs') should not be asked to fill the role of a sensible and reliable carer. It is common that after prolonged drug use people take a number of months to acquire psychological stability and well being.

Acceptance of an unsuitable carer increases the risk that the patient may take prescribed medication as well as illicit drugs. Such mixtures of drugs, e.g. Clonidine with heroin, may lead to serious complications.

Treatment

Assessment and use of an appropriate treatment strategy for each individual case is of great importance. Not all the individuals who use heroin will experience a clinically significant withdrawal. Their discomfort, when it arises, can be readily relieved by medication for symptomatic relief. When the withdrawal is severe, the patient will need additional medication and this may need to be done as an inpatient of a Drug and Alcohol Service.

Principles of pharmacological therapy

Relief of withdrawal symptoms: A combination of medications will provide good relief of opioid withdrawal symptoms. The mainstay of pharmacotherapy is Clonidine which alleviates most withdrawal symptoms, though not anxiety or craving so much. Diazepam may be prescribed provided other conditions for detoxification are fulfilled. Other drugs used for symptomatic treatment include hyoscine, metoclopramide, quinine and an anti-diarrhoeal agent. The same general rules listed above for alcohol detoxification apply to opioid detoxification.

Medication should be commenced when:

The person undergoing detoxification has returned home, and the carer is present. It is hazardous to commence drug therapy while the person is attending a general practice, a drug and alcohol service, and especially if they have to transport themselves over long distances.

At least six hours have elapsed since the last use of heroin. There is a recognised interaction between opioid drugs and Clonidine. The combination of the two can produce excessive sedation.

Symptoms of opioid withdrawal have become apparent. Some opioid dependent people, even those with a history of previous withdrawal syndrome, will not experience a clinically significant withdrawal when they cease opioids.

The most convenient drug to relieve opioid withdrawal symptoms is Clonidine ("Catapres"), an $_2$ adrenergic agonist, more usually prescribed for the treatment of hyertension. Clonidine relieves most of the physical symptoms of opioid withdrawal

such as chills, piloerection ("gooseflesh"), and shakiness, and alleviates the psychological symptoms such as anxiety and craving to some extent. The main side effect of Clonidine is postural hypotension. In the main, this is a dose-dependent side effect. Occasionally postural hypertension is seen with small doses. And it is appropriate to check blood pressure (lying and standing) before and 30 minutes after an initial dose of 150 micrograms to check that there is not a sudden drop in blood pressure on standing. The dosage will depend on the size of the person and the severity of any withdrawal symptoms when first seen. In general, if the patient weights less than 70 kg, a lower dose (150 mcg) should be commenced.

Clonidine regime TABLE 5

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6 am 12 mid-day 6 pm 12 midnight

Day 1 150 - 300 mcg 150 - 300 mcg 150 - 300 mcg 150 - 300 mcg

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Day 2 150 - 300 mcg 150 - 300 mcg 150 - 300 mcg 150 - 300 mcg

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Day 3 150 mcg 150 mcg 150 mcg 150 mcg

Day 4 150 mcg 150 mcg 150 mcg 150 mcg

Day 5 75 mcg 75 mcg 75 mcg 75 mcg

Day 6 75 mcg 75 mcg 75 mcg 75 mcg

Anxiety and craving can be blunted to some extent by diazepam. This is appropriate for inpatient detoxification, but there are greater risks of it fuelling drug dependence when it is prescribed on an ambulatory basis. Therefore, when diazepam is used in a home setting, only low dosages (5 mg four times per day) for a maximum of four days should be prescribed.

Other physical symptoms are treated as and when they arise. Abdominal cramps, common on the second and third days, respond to hyoscine ("Buscopan") 20 mg every six hours, either orally or intramuscularly. Diarrhoea, when profuse, is treated with Lomotil or loperamide. Muscle cramps are relieved by quinine 300 mg twice daily.

In cases of mild dependence the physical withdrawal syndrome from heroin usually lasts three days, and medication can be tailed off rapidly after that. Psychological symptoms are much longer lasting, and the overwhelming reason why patients relapse into opioid use.

To prevent complications arising from simultaneous use of illicit opiates and medication prescribed for relief of withdrawal, patients should be given daily prescriptions. A doctor or nurse should see the patient every day to check blood pressure, progress of withdrawal and any signs of possible opiate intoxication.

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Appendix A - Contract for home detoxification - patient

DATE:

Before signing, please ensure that you read, understand and agree to the following:

- **You agree to undertake a period of detoxification from the following date**
-

- **You agree that during this time you will follow all medical orders, and that will not take any alcohol/drugs (fill in the name of drug in the case of benzodiazepines or opiates).**

-

- **Should you drink/take during this time, your detoxification programme will be terminated.**
-

- **You agree to report any concerns or problems immediately, and you understand the procedure in case of an emergency.**
-

Please write the emergency procedure here:

Name and signature of the detoxifying patient

Name and signature of carer

Name and signature of supervising doctor/nurse

Appendix B - Contract for home detoxification - carer

DATE:

Before signing, please ensure that you read, understand and agree to the following:

- **You agree to support**
-

(patient's name)

while he/she undertakes detoxification from

(alcohol/drug)

- **His/her detoxification will commence on**
-

(date)

- **You agree that during this time you will supervise all medication prescribed. If**

(patient's name)

starts drinking/taking

(name of drug)

you agree to stop giving the medication and to notify the doctor promptly. You agree to report any concerns or problems which may arise.

- **You understand the emergency procedure. Please write the procedure here:**
-

Name and signature of carer

Name and signature of supervising doctor/nurse

Appendix C - The alcohol withdrawal chart

ITEM 1 PERSPIRATION

0 No abnormal sweating

1 Moist skin

2 Localised beads of sweat, e.g. on face, chest etc.

3 Whole body wet from perspiration

4 Profuse maximal sweating, clothes, linen etc. are wet

ITEM 2 TREMORS

0 No tremor

1 Slight intention tremor

2 Constant slight tremor of upper extremities

3 Constant marked tremor of extremities

ITEM 3 ANXIETY

0 No apprehension or anxiety

1 Slight apprehension

2 Apprehension or understandable fear, e.g., of withdrawal symptoms

3 Anxiety occasionally accentuated to a state of panic

4 Constant panic-like anxiety

ITEM 4 AGITATION

0 Rests normally during day, no signs of agitation

1 Slight restlessness, cannot sit or lie still, awake when others asleep

2 Moves constantly, looks tense, wants to get out of bed but obeys requests to stay in bed

3 Constantly restless, gets out of bed for no obvious reason, returns to bed if taken

4 Maximally restless, aggressive, ignores request to stay in bed

---

ITEM 5 AXILLA TEMPERATURE

0 Temperature of 37.0 C or less

1 Temperature of 37.1 - 37.5 C

2 Temperature of 37.6 - 38.0 C

3 Temperature of 38.1 - 38.5 C

4 Temperature above 38.5 C

ITEM 6 HALLUCINATIONS*

0 No evidence of hallucinations

1 Distortions of real objects, aware that these are not real if this is pointed out

2 Appearance of totally new objects or perceptions, aware that these are not real if this is pointed out

3 Believes that hallucinations are real but still orientated in place and person

4 Believes himself to be in a totally not existent environment, preoccupied and cannot be diverted or reassured

ITEM 7 ORIENTATION

0 The patient is fully orientated in time, place and person

1 The patient is orientated in person but is not sure where he is or what time it is

2 Orientated in person but disorientated in time and place

3 Doubtful personal orientation, disorientated in time and place; there may be short periods of lucidity

4 Disorientated in time, place and person, no meaningful contact can be obtained

---

***Item 6 - Hallucinations:**

Spontaneous sense perceptions, sight, sound, taste, and touch for which there is no external basis.

Name and signature of carer

Name and signature of supervising doctor/nurse

Appendix D - Practical ways of helping patients deal with anxiety

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***This part of the text is reproduced, with permission, from Guidelines for the Prevention and Management of Benzodiazepine Dependence,* AGPS, *Canberra,* 1992.**

Information sheet - relaxation techniques for anxiety

Although these instructions may be adequate, many people find it helpful to obtain relaxation training either individually or in classes. Your doctor or community health centre should be able to direct you to your nearest training centre.

Relaxation can be used when you feel tense and worried. Read the instructions and familiarise yourself with them before having a go. Be patient and give yourself several tries before expecting the full benefits. It can take time to learn how to relax. Keep a diary of your efforts so that you can follow your progress. A friend or relative may help you stick to the task, particularly when progress seems slow and difficult.

Preparation

- **Sit in a comfortable chair or lie down somewhere comfortable in a quiet, warm room where you will not be interrupted.**
- **If you are sitting, take off your shoes, uncross your legs, and rest your arms on the arms of the chair.**
- **If you are lying down, lie on your back with your arms at your sides. If necessary use a comfortable pillow for your head.**
- **Close your eyes and be aware of your body. Notice how you are breathing and where the muscle tensions are. Make sure you are comfortable.**
-

Breathing

- **Start to breathe slowly and deeply, expanding your abdomen as you breathe in, then raising your rib cage to let more air in, until your lungs are filled right to the top.**
- **Hold your breath for a couple of seconds and then breathe out slowly, allowing your rib cage and stomach to relax and empty your lungs completely.**
- **Do not strain - with practice it will become much easier.**
- **Keep this slow, deep, rhythmic breathing going throughout your relaxation session.**

-

Relaxing

After 5-10 minutes, when you have your breathing pattern established, start the following sequence tensing each part of the body on an in-breath, hold in your breath for 10 seconds while you keep your muscles tense, then relax and breathe out at the same time.

1 Curl your toes hard and press your feet down - then relax.

2 Press your heals down and bend your feet up - then relax.

3 Tense your calf muscles - then relax.

4 Tense your thigh muscles, straightening your knees and making your legs stiff - then relax.

5 Make your buttocks tight - then relax.

6 Tense your stomach as if to receive a punch - then relax.

7 Bend your elbows and tense the muscles of your arms - then relax.

8 Hunch your shoulders and press your head back into the cushion or pillow - then relax.

9 Clench your jaws, frown and screw up your eyes really tight - then relax.

10 Tense all your muscles together - then relax.

Remember to breathe deeply and be aware when you relax of the feeling of physical well-being and heaviness spreading through your body.

After you have done the whole sequence and you are still breathing slowly and deeply, imagine something pleasant, e.g. a white rose on a black background, a

beautiful country scene, or a favourite painting. Try to 'see' the rose (or whatever) as clearly as possible, concentrating your attention on it for 30 seconds. Do not hold your breathing during this time, continue to breathe as you have been doing. After this, go on to visualise another peaceful object of your choice in a similar fashion.

Lastly, give yourself the instruction that when you open your eyes you will be perfectly relaxed but alert.

Short routine

When you have become familiar with this technique, if you want to relax any time when you only have a few minutes, do the sequence in a shortened form, leaving out some muscle groups, but always working from the feet upwards. For example you might do parts 1,4,6,8 and 10 if you do not have time to do the whole sequence.

[The above information has been extracted from Wilkinson G. (1989) Depression: Recognition and Treatment in General Practice, Radcliffe Medical Press, Oxford with permission].

The six-second breath

This tip can be learned even if you have not learned the sequence above. Controlling your rate of breathing is one of the most important things you can do to stop your anxiety from getting out of control. If you keep your breathing to one breath every 6 seconds this will help. You can breathe in over three seconds and out over the next three seconds. This can be in stages, e.g. in-in-in, out-out-out and so forth. Th six second breath can be used anywhere and any time when you feel anxious. It does pay however, to practise this technique a few times per day so that you will have it rehearsed for a time that you really need it.

Structured problem solving -

a technique for the management of anxiety

The structured problem solving approach which is appropriate for patients made anxious by some threatened misfortune, is displayed on the following page. At first glance it appears to be little more than applied common sense - carefully identify what troubles you, work out how to deal with it, do what has to be done, then review progress - but acting in a common sense fashion is exactly what people who are anxious have difficulty in doing. The procedure is actually very sophisticated for, with the help of the doctor's good judgement, the patient learns to appraise situations accurately and then develop appropriate reality-focused and emotion-focused techniques for coping. After one or two crises handled in this way, patients seem to learn to carry out the technique for themselves without the doctor's help. Benzodiazepines were never able to achieve this.

Information sheet - structured problem solving

Step 1: What is the problem/goal?

Ask about the problem/goal, listen carefully, ask questions. Then write down exactly what the patient identifies as the problem/goal.

Step 2: List all possible solutions

Put down all their ideas, even bad ones. List the solutions without discussion at this stage.

1 4

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2 5

---

3 6

Step 3: Discuss each possible solution

Quickly go down the list of possible solutions and have the patient discuss the main advantages and disadvantages of each.

Step 4: Choose the 'best' or most practical solution

Have the patient choose the solution that can be carried out most easily to solve (or begin to solve) the problem.

Step 5: Plan how to carry out the most practical solution

Get the patient to list resources needed and the major pitfalls to overcome.

Practice difficult steps with the patient.

Step 1

Step 2

Step 3

Step 4

Step 6: The patient implements what has been planned then returns to see the doctor

Step 7: Review implementation and praise all efforts

Focus on achievement first. Identify what has been achieved then what still needs to be achieved. Go through steps 1-7 again in the light of what has been achieved or learned. Do not reassure, do encourage.

Extracted from Andrews (1991) The Management of Anxiety, Australian Prescriber, 14: 17-19. Used with permission.

This information is also available on pre-printed pads, which can be used in the clinical situation. They can be obtained from the Clinical Research Unit for Anxiety Disorders, University of New South Wales, 299 Forbes Street, Darlinghurst, NSW, 2010.

Information sheet - hints for better sleeping

Most people at some time in their lives have difficulty sleeping. For most people this is a temporary phenomenon related to important events occurring in their lives. Other people feel as if they have never been able to get a good nights sleep.

There are some background facts worth remembering:

- **Different people require different amounts of sleep, usually within the range of 5-10 hours a day. What is enough sleep for one person, will be insufficient for another. In addition, with advancing age people need less sleep, so cannot expect to sleep as long as they did when younger.**
- **If you cannot fall asleep you eventually will. Your body needs sleep. Whether it is later that night, or on a subsequent night you are likely to fall asleep.**
- **Sleeping tablets such as the benzodiazepines do have a very limited role in sleep disorders, but they can produce a phenomenon called 'rebound insomnia'. This means when you stop taking a sleeping tablet your insomnia may become worse than it was originally.**

There are a number of common sense tips, that may help your sleeping.

- **Have a comfortable sleeping environment**

This may require a good supportive mattress and a well ventilated bedroom that is not too warm.

- **Establish a regular sleep-wake cycle**

It helps to have a similar bed-time and wake-up time on most days, possibly including weekends. Although sleep-ins are enjoyable for most, they can delay your sleep-wake cycle, so that if you regularly wake-up later you are likely to fall asleep later too. A 'sleep routine' may include regular activities leading up to bed-time, e.g. showering, brushing teeth, which all may promote sleep and relaxation.

- **Avoid day time naps**

If you cannot sleep at night it may be because you are getting some of your sleeping done during the day time. If you have had a bad nights sleep it is preferable to stay awake right through to the following evening rather than catching up through day time naps.

- **Avoid taking drugs before bed-time that will stimulate your nervous system**

The common drugs that cause problems are caffeine (coffee, tea, cola drinks) and nicotine (cigarettes). Although alcohol is a drug which depresses the nervous system, it can disrupt the sleep-wake cycle in the early hours of the morning and therefore your intake of alcohol during the day may need to be reduced. For some people, consumption of caffeine may need to stop up to 12 hours before bed-time.

- **Do not exercise before bed-time**

This can similarly have an alerting effect, although exercise earlier in the day can be helpful to increase physical tiredness.

- **If you cannot sleep, try not to worry about it**

As mentioned above, your body will eventually demand sleep. It is preferable to do things if you cannot sleep - such as read or watch television - until you feel sufficiently tired that you need to go back to bed. Lying in bed trying to make yourself sleep will only make you even more alert, worried, annoyed and therefore, less able to sleep.

GUIDE TO HOME DETOXIFICATION

This book was produced with funds from the National Drug Strategy.

Australia 1996

Drug and Alcohol Department

Central Sydney Area Health Service, Camperdown 2050, Sydney, Australia.

1. Note: 10 grams of alcohol is equal to approximately one standard drink. A middy of full strength beer = one glass of wine = one nip of spirits = one standard drink.

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