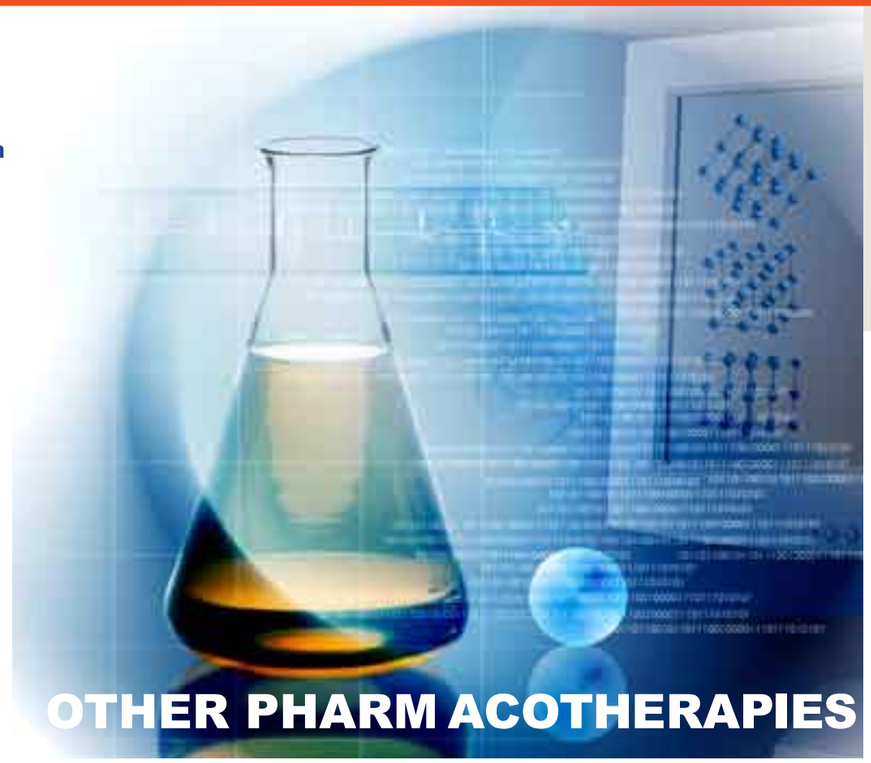
DRUG INFORMATION

OTHER PHARM ACOTHERAPIES



Pharmacotherapy is the term for a range of medications used to treat drug dependence. These medications assist in withdrawal management, and encourage stability in dependent opiate users by substituting the drug with medications such as methadone to counteract withdrawal symptoms and encourage abstinence from the drug.

These types of medications are available for tobacco (i.e. nicotine patches) and opiate dependence. Research and trials are being conducted to find similar treatments for meth-amphetamine dependence.

Types of pharmacotherapies

- Methadone
- Buprenorphine, also known as Subutex or 'bupe'
- Buprenorphine/Naloxone combination, also known as Suboxone
- Naltrexone
- Levo-alpha-acetyl-methadol also known as LAAM
- Slow Release Oral Morphine (SROM).

Naltrexone

Naltrexone has been used extensively overseas. It is an opioid antagonist that blocks the effects of opioids in the body, and can be used in two quite different ways. It can be used for rapid detoxification, and also after detoxification used to support abstinence. If a person uses heroin or any other opioids while on naltrexone, it will have little or no effect for the user. The concept behind naltrexone as a treatment is that if the user feels nothing each time they use heroin, they will stop using. It is most effective when taken for at least six to 12 months.

Naltrexone rapid detoxification

Detoxification is the management of physical withdrawal from a drug of dependence. It can occur in a wide range of settings; at home without any medication, at home with medication, and as a clinic in-patient so that associated risks and discomfort are minimised.

Variations on rapid and ultra rapid detox using Naltrexone and other antagonists have been used for over 10 years in various countries, but the efficacy of this type of treatment has not yet been scientifically quantified. As an opioid antagonist, naltrexone speeds up withdrawal from heroin or any other opiate. Methods vary, but in most programs people are sedated to some degree. Anaesthesia is not recommended due to the associated risks, and fatalities while under anaesthesia have been reported overseas.

The use of naltrexone anesthesia to achieve rapid detoxification is not currently supported by the Health Department, as there are concerns about its safety and the lack of evidence proving its effectiveness.

Drawbacks of naltrexone rapid detoxification

Clinical trials in Australia suggest that — like all detox procedures — rapid detox is only the beginning of treating drug dependency, and that long-term outcomes are no different, and no better, than those associated with standard detox procedures. To quote Dr. James Bell, who conducted the Sydney Hospital Pilot Study, "This is not the magic bullet. Being drug-free is a change in consciousness".

It is doubtful that naltrexone removes the physical cravings for opiates for everyone, and it certainly does not remove the psychological dependency. Counselling, a good support group, and the support from family and friends, are essential for the next few years — maybe even a lifetime — for many people. This treatment should only be considered if there is an absolute faith in the medical professionals supervising the treatment, and never tried at home. The costs and risks of the treatment should be fully evaluated and considered. Naltrexone is not registered in Australia for rapid detoxification.

Naltrexone maintenance

When taken daily, naltrexone blocks the effects of heroin and other opioids. It should only be taken under medical supervision. The use of black market naltrexone is dangerous. If someone is still dependent on opioids when they take naltrexone, they will experience severe withdrawal symptoms (as in the rapid detox method). A person must have ceased heroin use seven to 10 days *before* attempting naltrexone maintenance, and ceased methadone use 15 days before commencing naltrexone. The usual dose is half to one tablet daily. The basis of treatment is that if a person on naltrexone uses a normal dose of heroin it will have no effect.

Many programs and trials of naltrexone maintenance treatment (including Australian research) report very high drop-out rates. It seems that naltrexone is most useful for those who are very highly motivated to stop using, and who have strong support and incentives to do so. It is important not miss doses, and it is good practice for a carer to supervise doses.

There are no withdrawal symptoms when stopping naltrexone, but this should only be done with adequate counselling to avoid the likelihood of relapse. Patients should carry identification that they are taking naltrexone, and in the event of an emergency or medical treatment, advise doctors that opiate painkillers will be ineffective.

Finally, remember that once detoxed or maintained on naltrexone, tolerance to opiates is back to zero. There have been numerous reports of people overdosing on heroin after naltrexone detox or stopping maintenance treatment. If a person on naltrexone is unconscious, call an ambulance.

Buprenorphine

Buprenorphine is an opioid medication that is similar to methadone, but different as it is a *partial agonist* – it has milder opioid effects at high doses, and withdrawal from Buprenorphine can be less severe than from heroin or methadone. It is used in short-term withdrawal programs to get through the discomfort of stopping or reducing heroin use, and it is used as a maintenance treatment to support people to stop using heroin. It may be useful for people who have come down to a low dose of methadone (30mg daily or less), to transfer to Buprenorphine as the withdrawal is less severe than methadone.

Buprenorphine comes in sublingual tablet form which means the tablets are placed under the tongue until they dissolve, which can take two to eight minutes. They are not effective if chewed or swallowed. They are also dangerous if they are injected, and can cause problems with vein damage, blood clots and increased risk of infections and other health problems.

Buprenorphine comes in three tablet sizes: 8mg, 2mg and 0.4 mg tablets. The effects of buprenorphine last longer than methadone, and while treatment programs will usually start with once-a-day dosing, after a period of time people who have stabilised may be dosed once every two — or in some cases three — days. In general, people will take between eight and 24 mgs per day, while shorter term withdrawal programs may prescribe lower doses of between four and 12 mg per day.

The basis of this form of treatment is to prevent withdrawal symptoms when heroin use is stopped, and to ensure that no effect of a normal dose of heroin will be felt if it is used while stabilised on the treatment. For this reason doses should not be missed. Buprenorphine should only be taken under medical supervision. The initial dose should be small, and taken at least six hours after the last heroin use and 24 hours after methadone doses, or withdrawal symptoms will occur. It is not suitable for people to withdraw from high doses of methadone, and it is not approved for use in pregnancy as there has not been enough research to understand the effects.

Buprenorphine has similar side effects to methadone (see page 85), but generally they are mild and settle down after the first week of treatment. When starting treatment, or during dose increases, patients should not drive or operate machinery.

It is dangerous to mix Buprenorphine with other drugs such as alcohol, benzos or methadone. Patients should carry identification that they are taking Buprenorphine, and advise doctors of the fact, as in hospital or in emergencies, opiate painkillers will be ineffective.

Withdrawal from Buprenorphine usually causes fewer symptoms, and for a shorter period than from other opioids, but should be done slowly from maintenance doses and with adequate support. Remember that once someone has detoxed, tolerance to opiates soon returns to zero.

Buprenorphine on its own is relatively safe, but if mixed with other drugs and alcohol it can be deadly. Using heroin with Buprenorphine is risky, and can cause other problems such as reducing the effect of heroin. This may create the tendency to use more heroin, which can increase the risk of overdose.

Suboxone (buprenorphine/naltrexone)

Suboxone comes in a tablet form designed to dissolve under the tongue. It usually takes two to 10 minutes to dissolve, and the full effect will be felt within 30 to 60 minutes. The full effect occurs after one to four hours later; however this will vary according to the dose and the individual. As with buprenorphine, if it is swallowed or chewed, withdrawal symptoms may be experienced as it is less effective. Suboxone is also useful in reducing the risks of these substitution types of medications being diverted (taken during the dosing procedure to be either injected or sold).

First aid for possible overdose

These are basic first aid strategies if someone on pharmacotherapies passes out or experiences problems:

- If the person is drowsy, rouse them regularly to ensure they do not slip into unconsciousness. Snoring or gurgling sounds may indicate a person's airways are partially blocked. Do not let their head fall forward or back; this restricts oxygen flow to the lungs.
- If the person is unconscious, turn them on their side to reduce the risk of them vomiting and choking. Make sure their airways are clear. Do not leave them alone. Call an ambulance immediately on 000 or 112 from a mobile phone (you don't need credit or to be in range).
- If breathing has stopped, give mouth-to-mouth resuscitation. If there is no pulse, commence CPR if you are trained.

Research and developments in detox and treatment

Contact the National Drug & Alcohol Research Centre, your local community health centre or the Alcohol & Drug Information Service in your State for further information.

TIPS FOR FAMILIES

Support and encourage the person to also attend counselling to complement the use of pharmacotherapies. Be sensitive to any depression that may be associated with both opioid withdrawal and naltrexone use. If you feel you can support your family member then be committed, and know what to do in the event of an overdose.

Pharmacotherapies are not a miracle cure for opioid dependence. This is why counselling and other support are also important when a person is on these types of treatment programs. These programs take a regular — often daily — commitment in order for these medications to work effectively.

BACKGROUND INFORMATION

Prescribed and supervised heroin is available to a small number of people in the UK and some European countries, and there is evidence that its use may be effective where other treatments fail. In 1997, the then Liberal ACT Government attempted to introduce a prescription heroin trial, but this was stopped by the Federal Government. Methadone was the only available therapy for twenty years; however new therapies have since been developed.

Buprenorphine is a long-acting opioid medication used as a pain reliever, and has been extensively used in France as a maintenance therapy in more than 50,000 patients for over several years. It was approved for use in Australia in 2000 following a large trial coordinated by the National Drug & Alcohol Research Centre. Overall research shows that substitution treatment with buprenorphine works as well as methadone; people will simply prefer one medication or the other, and due to individual differences, one may be more effective for some people than the other. Some people feel more alert on commencing and during buprenorphine than on methadone.

LAAM (Levo-alpha-acetyl-methadol) is a synthetic opioid with very similar effects to methadone; it is also used as an opioid substitution drug. It has been trialled in South Australia and Victoria, but is unlikely to be marketed as there is a concern that although it has been extensively used overseas, there is evidence of the risk of significant side-effects in a small number of patients.

SROM (Slow Release Oral Morphine) is an opioid analgesic. Small trials of its use have been inconclusive.

Naltrexone was developed in 1964 and was approved in tablet form by the United States Food and Drug Administration in 1994 for treating alcohol dependence. In Australia, a pilot study was performed from 1994 to 1996 on dependent heroin users who volunteered to be part of the trial, to determine the safety and acceptability of naltrexone treatment in preparation for a larger controlled trial. The drug became available in the late 1990s as an official treatment option.

Suboxone was developed in the United States in the 1990s as a treatment for opiate dependence. It is different from other pharmacotherapies in the way it works; it has an additional component of naltrexone which causes severe withdrawal if it is injected. In 2001, clinical trials were carried out in Australia, and in July 2005, it was registered as an official form of treatment for opiate dependence.