

# What You Need To Know: Addiction - Prescribing Naltrexone

B K L Yeo

## What is Naltrexone?

Naltrexone (Trexan®) is a long acting competitive opioid antagonist. It has been used extensively in relapse prevention of opiate addicts and sometimes for alcohol dependent patients.

## Relapse prevention of opiate addicts?

Many studies have shown that the use of Naltrexone has reduced the relapse rate for heroin addicts. The success figures quoted vary depending on the motivation of the subjects, the level of family support and the availability of counselling services. In Singapore, the Prisons Department embarked on the Naltrexone Pilot Programme in 1993, tracking a cohort of 60 heroin addicts over a one year period. It found that 50.8% – 76.3% completed the one year follow-up programme as compared to 20.4% – 29.4% for two other control cohorts not on Naltrexone<sup>(1)</sup>. These figures are comparable to others done abroad<sup>(2)</sup> although it must be borne in mind that these local addicts are on compulsory follow-up by law with urine tests over a two-year supervision period.

## Relapse prevention of alcohol dependent patients?

The use of Naltrexone in the maintenance phase of alcohol dependence is newer and research on the subject so far has been focussing on shorter follow-up periods, generally around three months duration<sup>(3,4)</sup>. It is suggested that Naltrexone treatment results in lower levels of alcohol craving, fewer drinking days and lower rates of relapse as compared with placebo. The problem we have in prescribing Naltrexone to

our alcohol dependent patients is that it is not recommended for patients with deranged liver enzymes. Our patients invariably have raised hepatic enzymes which do not normalise after the detoxification period of about ten days to two weeks. In our experience at National University Hospital, although we have managed to persuade some of our alcohol dependent patients to start Naltrexone, we have yet to embark on such treatment when the patient still has raised liver enzymes.

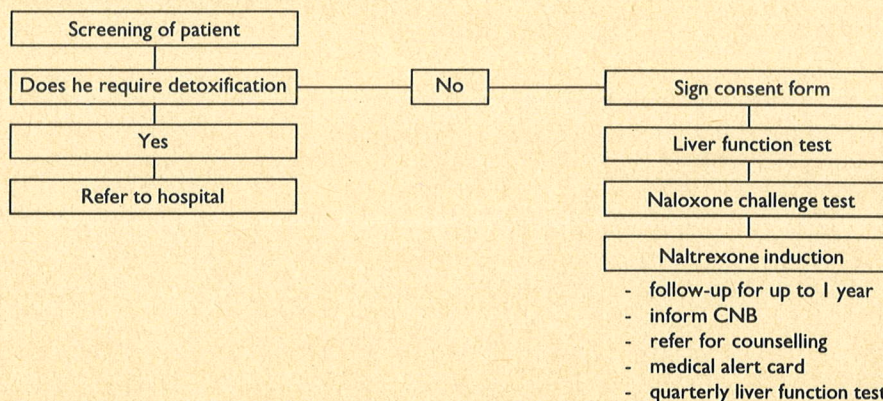
## How can I use Naltrexone in relapse prevention of heroin addicts?

Screening and liver function tests are important as Naltrexone should not be prescribed for the following:

1. pregnant patients.
2. lack of parental consent if age below 21 years.
3. abnormal liver function test results.
4. other serious pre-existing medical conditions that require medical attention, especially hepatitis and liver failure.

The consent form is necessary as the patient has to declare that he has not taken opiates for the preceding two weeks and precludes him from suing the medical practitioner if there are any ill-effects from consuming Naltrexone. The use of a long acting opiate antagonist will precipitate and maintain a withdrawal state if the patient had been using opiates recently. Hence, it is recommended that before commencing Naltrexone therapy, to be doubly sure, a naloxone challenge test is instituted. Naloxone is a short acting opiate antagonist and any withdrawal features precipitated would only be short-lived. The

Flow chart for treating heroin addicts with Naltrexone<sup>(5)</sup>



Department of Psychological  
Medicine  
National University Hospital  
5 Lower Kent Ridge Road  
Singapore 119074

B K L Yeo, MBBS, M Med  
(Psych), Dip Child & Adol Psych-  
Distint, (Lond)  
Senior Lecturer

Naloxone challenge can be administered intravenously as set out in the guidebook issued by the Singapore Medical Association and the College of Family Physicians<sup>(5)</sup>; however a subcutaneous injection of naloxone can be selected instead, as used in National University Hospital. The dose of Naloxone used in the subcutaneous challenge is 0.4 mg (1 ampoule) and that advocated by the Prison Medical Unit is 0.8 mg (2 ampoules). If symptoms of heroin withdrawal appear, the patient is deemed not suitable for Naltrexone therapy.

Naltrexone is prescribed as one tablet of 50 mg daily. However, to aid compliance in rehabilitation centres, subjects would graduate from daily dosing to three doses per week (Mon-100 mg, Wed-100 mg, Fri-150 mg). Our experience with volunteer drug addicts is that daily dosing is not a problem. Other issues that have to be dealt with would be:

1. the need to inform Central Narcotics Bureau once treatment is initiated or discontinued. This is easily done either by fax or by post.
2. the need to issue a medical alert card for the patient to carry at all times to advise medical personnel to administer a non-opiate analgesic drug or alternatively to use larger doses of opiate analgesic drugs during emergencies.
3. referral for counselling to maintain drug-free state. Possible sources to refer to would be:
  - i) Singapore Anti-Narcotics Association (SANA)
  - ii) Singapore Corporation of Rehabilitation Enterprises (SCORE)
  - iii) Narcotics Anonymous
  - iv) National University Hospital - Department of Psychological Medicine

### **What are the common side-effects of Naltrexone?**

The common side-effects seen are:

1. gastrointestinal discomfort
2. anxiety and insomnia
3. headache
4. decreased potency

However, the main concern would be hepatotoxicity, hence the need to do the liver function test on a quarterly basis.

### **In Summary**

Naltrexone is of proven efficacy as a treatment modality in the relapse preventive programme of opiate abusers. It complements the other interventions such as individual counselling, family therapy and self-help groups. The initiation of Naltrexone therapy after detoxification would be of vital importance in maintaining an individual's drug-free state. Naltrexone has no intrinsic opiate activity and has no resale value in the black market unlike methadone.

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