Cheshire and Wirral Partnership NHS
NHS Foundation Trust

**Document level:** Trustwide (TW)
**Code:** MP23
**Issue number:** 1

# Alcohol withdrawal management in the inpatient setting

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|---|---|
| Lead executive | Medical Director |
| Author and contact number | Clinical Director Drug & Alcohol service 0151 604 7309,<br>Lead Clinical Pharmacist - 0151 482 7930 |

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|---|---|
| Type of document | Guidance |
| Target audience | All clinical staff |
| Document purpose | To enable a safe alcohol detoxification protocol for patients who are admitted onto CWP NHS Foundation Trust wards |

| **Document consultation** | | |
|---|---|---|
| AMH – Wirral | Yes | Acute Care Consultants, Modern Matron |
| AMH – West | Yes | Acute Care consultants, Medical Director |
| AMH – East | Yes | Modern Matron, Acute Care Consultants |
| D&A services | Yes | Clinical Director, Lead Nurse |
| CAMHS | N/A | |
| LD services | N/A | |
| CCWC services | N/A | |
| Corporate services | Yes | Clinical Pharmacy Team |
| Staff side | N/A | |
| Other – | N/A | |
| Groups / Committees | Yes | Medicines Management Group |
| Involvement taskforce | N/A | |

| | | |
|---|---|---|
| Approving meeting | Medicines Management Group | 25-Apr-13 |
| Original issue date | Apr-13 | |
| Implementation date | Apr-13 | |

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|---|---|---|
| CWP documents to be read in conjunction with | HR6 | Mandatory Employee Learning (MEL) policy |
| | CP35 | Physical health pathway and policy |
| | CP27 | Care and management of intoxicated service users – including management of risks associated with drug and alcohol use in the inpatient setting |
| | CP64 | Anaphylaxis policy |
| | MP1 | Medicines policy |
| | MH13 | Part IV &IVA – Mental Health Act 1983 Consent to treatment |

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|---|---|
| Training requirements | Yes - There are specific training requirements for this document.<br>Anaphylaxis training for nurse administration of Pabrinex®<br>Nurse training on injection site demarcation and administration of volumes of IM Pabrinex® |

| | |
|---|---|
| Financial resource implications | No |

**Equality Impact Assessment (EIA)**

| Initial assessment | Yes/No | Comments |
|---|---|---|
| Does this document affect one group less or more favourably than another on the basis of: | | |
| • Race | No | |
| • Ethnic origins (including gypsies and travellers) | No | |
| • Nationality | No | |
| • Gender | No | |
| • Culture | No | |
| • Religion or belief | No | |
| • Sexual orientation including lesbian, gay and bisexual people | No | |
| • Age | No | |
| • Disability - learning disabilities, physical disability, sensory impairment and mental health problems | No | |
| Is there any evidence that some groups are affected differently? | No | |
| If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable? | | |
| N/A | | |
| Is the impact of the document likely to be negative? | No | |
| • If so can the impact be avoided? | N/A | |
| • What alternatives are there to achieving the document without the impact? | N/A | |
| • Can we reduce the impact by taking different action? | N/A | |
| Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted. | | |

If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact.

For advice in respect of answering the above questions, please contact the human resource department.

| | | |
|---|---|---|
| Was a full impact assessment required? | No | |
| What is the level of impact? | Low | |

**Document change history**

| Changes made with rationale and impact on practice |
|---|
| 1. New policy |

**External references**

| References |
|---|
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**Monitoring compliance with the processes outlined within this document**

| | |
|---|---|
| Please state how this document will be monitored. If the document is linked to the NHSLA accreditation process, please complete the monitoring section below. | Ward managers and in-patient clinical staff in conjunction with the Locality pharmacy teams<br><br>Collating of completed SADQ assessments forms and detoxification charts and monitoring of any clinical incidents related to non-adherence to this policy document.<br><br>Retrospective In-patient alcohol detoxification audit. MMG will review findings and be responsible for actions from these audits<br><br>Review and update policy in line with national guidance and changes in clinical practice.<br><br>Collate data for 1 year and audit retrospectively Any deficiencies identified will be followed up via an action plan falling out of the audits which each in-patient unit will have to implement and give assurances to the Trust MMG upon implementation |

**Contents**

## 1. Introduction

These guidelines have been produced to help promote good practice in the pharmacological management of alcohol withdrawal and the prevention of Wernicke's syndrome in the in-patient setting.

The guidelines also offer advice on the management of patients who are admitted to CWP NHS Foundation Trust wards for other reasons but are found to be dependent on alcohol and require detoxification whilst an in-patient. These guidelines are not intended for home detoxification. Local substance misuse services should be contacted for more specialist advice and support for detoxification in the community.

## 2. Screening and assessment

The following tools for assessment and screening may be used:

### 2.1 The Shortened Audit (Alcohol Use Disorders Identification Test – appendix 1)

This is a 5 item self-completion questionnaire which can be used to screen for excessive alcohol consumption, taking less than 2 minutes to complete.

### 2.2 Severity of Alcohol Dependence Questionnaire (SADQ – appendix 2)

The SADQ can be helpful in measuring the severity of alcohol dependence. Where there is a history of alcohol dependency, a benzodiazepine withdrawal schedule using chlordiazepoxide as outlined in appendix 3a, appendix b, appendix c or appendix d may be used in conjunction with the investigations below to meet the individual's needs (Stockwell T, Murphy D, Morgan R, (1983)).

### 2.3 Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar) (appendix 7)

The Clinical Institute Withdrawal Assessment for Alcohol Scale (Sullivan et al., 1992) is a 10-item-scale for monitoring alcohol withdrawal symptoms which can be completed in about 5 minutes. It scores the severity of nausea, tremor, sweating, anxiety, agitation, headache, orientation and sensory disturbances.

## 3 Clinical investigations, signs, symptoms and management

### 3.1 Clinical examination

It is important to undertake a comprehensive alcohol clinical examination as this provides valuable data and the basis of a care plan for management.

Virtually every system in the human body can be damaged by alcohol. There are a number of specific physical signs that are highly suggestive of alcohol misuse which should be specifically sought and recorded if this diagnosis is being considered. These include:

- Spider naevi;
- Telangectasia;
- Facial mooning;
- Parotid enlargement;
- Palmer erythema;
- Dupuytren's contracture;
- Gynaecomastia.

**Note:** See appendix 8 for definitions

### 3.2 Haematological investigation

A standard set of bloods that would be recommended prior to detoxification are;

- Liver function tests (LFT's) & U&E's;
- Full Blood Count;
- Random / fasting glucose;
- If LFT's are significantly raised, check prothrombin time;
- Vitamin $B_{12;}$

- Folate.

GGT can be raised by other causes of liver disease and less commonly by pancreatic disease and following a heart attack. MCV can increase in people with vitamin $B_{12}$ deficiency, folic acid deficiency, thyroid disease, chronic liver disease, and during pregnancy. However, biochemical markers are useful for monitoring the effect of treatment on excess alcohol consumption. All tests reflect heavy drinking in the preceding weeks and if elevated, are useful to help motivate a reduction in alcohol consumption [SIGN 2003].

- **GGT** – Gamma-glutamyl transpeptidase;
- **AST** – Aspartate aminotransferase;
- **MCV** – Mean cell volume.

**Note:** See appendix 8 – Glossary for definitions

### 3.3 Alcohol withdrawal syndrome (AWS)

Alcohol withdrawal syndrome is the clinical syndrome that occurs when an individual who is physically dependent upon alcohol stops drinking or reduces their alcohol consumption (Burns 2004) and in some cases can be life-threatening. The risk of withdrawal is not directly related to intake (DTB, 1991, Morgan 1998). **This is illustrated graphically in figure 5.1 below**.

Early withdrawal symptoms occur up to 12 hours after the last drink. They include tremor, sweating, anorexia, nausea, insomnia and anxiety. Transient auditory hallucinations in clear consciousness may also occur.

Withdrawal seizures can occur 12 to 48 hours after the last drink and are more likely if there is previous history of withdrawal seizures or epilepsy or when a patient has had multiple detoxifications. In 30% of cases, seizures are followed by delirium tremens.

Severe withdrawal or delirium tremens develops usually after at least 72 hours of abstinence. Clinical features include marked tremor, confusion, disorientation, agitation, restlessness, fearfulness, visual and auditory hallucinations, delusions, autonomic disturbances, tachycardia, sweating, fever and dehydration.

Risk factors include severe dependence, previous history of delirium tremens, older age and co-existing medical conditions, for example, chest infection.

Signs and symptoms of autonomic arousal seen in alcohol withdrawal include

- Sweating;
- Tachycardia (100+bpm);
- Raised BP (>15mg/Hg from original baseline);
- Fever ( ≥38$^{o}$C);
- Hyperreflexia (see appendix 8 for definition);
- Characteristic tremor, starting in the hands but progressing to the head and trunk as severity worsens;
- Anxiety, restlessness, irritability, depression, insomnia and tiredness;
- Anorexia, nausea and weakness;
- Confusion.

| |
|---|
| The greater the number of withdrawal symptoms, the greater the risk of seizures and delirium tremens. |

### 3.4 Delirium Tremens

This is a toxic confusional state that occurs in around 5% of individuals undertaking an alcohol detoxification.

**Treatment of Delirium Tremens requires early diagnosis and emergency transfer to the general medical setting.**

Patients reporting consumption of more than 16 units per day during screening and assessment are particularly at risk. The characteristic symptoms are:

- Agitation;
- Apprehension;
- Confusion;
- Disorientation in time and place;
- Visual and auditory hallucinations;
- Insomnia;
- Nausea;
- Vomiting;
- Poor coordination;
- Paranoia;
- Fever;
- Poor concentration;
- Intermittent disorientation and agitation lasting possibly 1 to 2 weeks post recovery.

### 3.5 Fluids and electrolytes and blood glucose

Some individuals may experience problems with increased sweating, fever or gastro-intestinal disturbance and may be at risk of serious disturbance in fluid and electrolyte balance, which will require monitoring. Risks include a fall in potassium levels and a possible fall in magnesium levels which could lead to an increased likelihood of delirium tremens (Turner et al.,1989). Blood sugars also require monitoring during the initial stages of an alcohol detoxification, as there is an increased risk of hypoglycaemia.

Serum potassium levels can fall increasing the risk of seizure. The clinical ward staff should be aware of the signs of hypokalaemia (including muscle weakness, hypotonia, confusion and arrhythmia) and bring this to the attention of doctors.

### 3.6 Prescribing

If assessed as appropriate, a hospital detoxification can be undertaken effectively and safely. It will be undertaken, using a reducing regime of **chlordiazepoxide** (see appendix 3a, appendix b, appendix c, appendix d) in the majority of patients, based on the SADQ assessment (see appendix 2) and the blood profiling results. Where there is known hepatic insufficiency, oxazepam (see appendix 4 for dose equivalence) is considered the drug of choice for alcohol detoxification. (Contact your locality clinical pharmacist for advice).

**NOTE:**

- Doses for patients over 65 years should be as advised in appendix 3c and appendix 3d;
- Caution in patients with respiratory disease or hepatic impairment.

Regimes will be tailored to the individual's need after SADQ assessment (see appendix 2) and be given at set times during the day with PRN dosing as appropriate. It may be necessary to add additional medication, to counteract any potential problems.

### 3.7 Vitamin supplementation

It is important to note that oral thiamine is poorly absorbed in alcohol dependent patients. All in-patients treated for alcohol withdrawal should receive Pabrinex® (high potency vitamins B and C) by intramuscular injection, one pair of ampoules daily, for five days (see appendix 3a, appendix b, appendix c, appendix d). See appendix 5 and appendix 6 for guidance on intramuscular (IM) administration of Pabrinex®.

**Potentially serious allergic adverse reactions to injectable thiamine may occur although this is very rare (1 in 5 million for the intramuscular route) and should not preclude use. Facilities for treating anaphylactic reactions (including resuscitation facilities) should be available when parenteral thiamine is administered.**

Parenteral treatment should be followed by treatment with oral vitamin preparations if Wernicke's encephalopathy is to be prevented. Prescribe Vitamin B Compound Strong TWO tablets three times daily and thiamine 100mg tablets TWO times daily **for a minimum of 2 weeks. After this period review and stop when dietary intake is adequate.**

### 3.8 Withdrawal seizures

In patients experiencing withdrawal seizures, **rectally** administered diazepam 500 micrograms per kg up to maximum of 30mg should be used (In over 65 years old, doses of 250 micrograms per kg up to a maximum of 15mg).The emergency team or ambulance should be called according to local procedure. The dose of rectal diazepam can be repeated after 15 minutes if necessary. No further doses should then be administered within the next 12 hours without obtaining specialist advice. **If rectal diazepam has been used, do not reduce the oral benzodiazepine dose for 24 to 48 hours in order to reduce the risk of further seizures.**

### 3.9 Treatment of reflux oesophagitis

During the alcohol detoxification patients may, as part of their withdrawal, exhibit signs of oesophageal reflux. These patients would benefit from a 7 day course of a proton pump inhibitor (PPI) e.g. lansoprazole 15 to 30mgs daily or omeprazole 20mg daily for the relief of symptoms.

For patients with moderate or severe liver disease, a 50% reduction of the daily dose is recommended i.e. 15mg lansoprazole or 10mg omeprazole daily.

**NOTE**: Ensure PPI is reviewed and discontinued once detoxification is complete.

### 3.10 Nausea and vomiting

It is not unusual for patients to experience some degree of nausea and vomiting in the initial phase of an alcohol detoxification; options to prescribe include metoclopramide 10mg tablets three times a day, buccal prochlorperazine 3mg 1 to 2 tablets twice daily or alternatively domperidone 10mg tablets up to three times a day.

### 3.11 Capacity and use of the Mental Capacity Act/ Mental Health Act

A clinical assessment may reveal that a patient who declines treatment for alcohol withdrawal lacks the capacity to make that decision. This will be the case when the patient has an impairment, or disturbance in the functioning of the mind, which renders that person unable to make the particular decision at the material time.

See CWP policy - Part IV & IVA – Mental Health Act 1983 Consent to Treatment.

## 4. Duties and responsibilities

### 4.1 Medical Director, Compliance, Quality and Regulation / Chief Pharmacist

Has the responsibility of overseeing the review and updating of this policy in line with national guidance and changes in clinical practice.

### 4.2 Chair of Medicines Management Group (MMG)

It is the responsibility of the chair to ensure that the minutes of the meetings reflect the approval process and that all reviews of the policy are timetabled within the work programme.

### 4.3 Line managers

Have responsibility to cascade information on the policy to all clinical staff that they manage ensuring that any training required on the policy is included in staff's personal development plan and clinical supervision.

### 4.4 Trust clinical staff

All clinical staff working in a clinical environment must be familiar with the policy and any subsequent updates. The training requirements for the use of medicines identified within the policy are specified on the front page. It is the responsibility of staff to keep up to date with current practice.

## Appendix 1 - Alcohol Use Disorders Identification Test (AUDIT)

| **Patients Name:** | | | **DOB:** | | **Date:** | | **0** | **1** | **2** | **3** | **4** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | How often do you have a drink containing alcohol? | Never (0) | Monthly or less (1) | 2 to 4 times month (2) | 2 to 3 times a week (3) | 4 or more times a week (4) | | | | | |
| 2 | How many standard drinks containing alcohol do you have on a typical day when you are drinking? | 1 or 2 (0) | 3 or 4 (1) | 5 or 6 (2) | 7 or 9 (3) | 10 or more (4) | | | | | |
| 3 | How often do you have 6 or more standard drinks on one occasion? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 4 | How often during the last year have you found that you were not able to stop drinking once you had started? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 5 | How often during the last year have you failed to do what was normally expected from you because of your drinking? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 6 | How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 7 | How often during the last year have you had a feeling of guilt or remorse after drinking? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 8 | How often during the last year have you been unable to remember what happened the night before because you had been drinking? | Never (0) | Less than monthly (1) | Monthly (2) | Weekly (3) | Daily or almost daily (4) | | | | | |
| 9 | Have you or someone else been injured as a result of your drinking? | Never (0) | Yes, but not in the last year (2) | | Yes, during the last year (4 ) | | | | | | |
| 10 | Has a relative or friend, doctor or other health worker been concerned about your drinking or suggest you cut down? | Never (0) | Yes, but not in the last year (2) | | Yes, during the last year (4 ) | | | | | | |
| **SCORING** | -The scores for each question are shown under each response.<br>-The minimum score: (for non-drinkers) is 0 and the maximum possible score is 40 | | | | | | | | | | |
| **0-7 Low risk**<br>**8-15 Hazardous**<br>**16-19 Harmful**<br>**20+ Dependent** (refer to Specialist services) | | | | | | | | | | | |

**Appendix 2 - Severity of Alcohol Dependence Questionnaire (SADQ)**

| Name | | No | | Date | |
|---|---|---|---|---|---|

**Instructions:** The following questions cover a wide range of topics to do with drinking. Please read each question carefully but do not think too much about exact meaning. Think about your **most recent** drinking habits and answer each question by placing a tick under the **most appropriate** heading. If you have any difficulties **ask for help.**

| Question | Never | Sometimes | Often | Nearly always |
|---|---|---|---|---|
| 1. Do you have difficulty in getting the thought of drinking out of your mind | | | | |
| 2. Is drinking more important than your next meal? | | | | |
| 3. Do you plan your day around when and where you can drink? | | | | |
| 4. Do you drink in the morning, afternoon and evening? | | | | |
| 5. Do you drink for the effect of alcohol without caring what the drink is? | | | | |
| 6. Do you drink as much as you want regardless of what you are doing the next day? | | | | |
| 7. Given that many problems might be caused by alcohol do you still drink too much? | | | | |
| 8. Do you know that you won't be able to stop drinking once you start? | | | | |
| 9. Do you try to control your drinking by giving it up completely for days or weeks at a time? | | | | |
| 10. First thing in the morning after drinking do you need a first drink to get yourself going? | | | | |
| 11. First thing in the morning after drinking do you wake up with a definite shakiness of your hands? | | | | |
| 12. First thing in the morning after drinking do you wake up retching or vomit? | | | | |
| 13. First thing in the morning after drinking do you go out of your way to avoid people? | | | | |
| 14. After a drinking session do you see frightening things or hear things that later you realise weren't real? | | | | |
| 15. After drinking, do you find you have forgotten what happened the night before? | | | | |
| 16. First thing in the morning after drinking alcohol, do you wake up sweating? | | | | |
| 17. First thing in the morning after drinking alcohol, do you have a strong craving for drink? | | | | |
| 18. First thing in the morning do you need to gulp your first few drinks down to get you sorted? | | | | |
| 19. First thing in the morning after drinking does your whole body shake? | | | | |
| 20. First thing in the morning do you need to drink more to get rid of the shakes? | | | | |

| Patients Name | | File Number | |
|---|---|---|---|

**Scoring:** The 20 items summed for a total score that can range from 0 to 60. Scale totals are interpreted as follows: 10 – 19 medium dependence and 20 or greater high dependence.

Scoring as follows:

| | | | |
|---|---|---|---|
| **Never** = 0 | **Sometimes** = 1 | **Often** = 2 | **Nearly always** = 3 |

Note. Reprinted with permission from D.Raistrick (1991) & Alcohol Concern

## Appendix 3 - Prescribing for alcohol dependence

### Alcohol withdrawal

Alcohol dependence and withdrawal may be treated in inpatient settings. Alcohol dependence may occur in combination with dependence on other classes of drugs. Where there is a history of alcohol and benzodiazepine use, a benzodiazepine withdrawal schedule as outlined below (appendix 3a, appendix b, appendix c or appendix d) may be used. The Severity of Alcohol Dependence Questionnaire (SADQ) (Stockwell et al 1979) can be helpful in measuring the severity of alcohol dependence.

**See appendices 3a, 3b, 3c and 3d for alcohol withdrawal regimes**

**Appendix 3a – Moderate Detoxification Regime**

**Inpatient drug treatment of detoxification – Age 18 to 65 years**

| **Age 18 to 65 years MODERATE DETOXIFICATION REGIME (SADQ 15-30)** |
|---|

| **Patients name** | |
|---|---|
| NHS Number | |
| Date of Birth | |
| Ward | |

**Pabrinex® and chlordiazepoxide are commenced on the same day, and should also be prescribed on the main drug prescription and administration chart**

**Oral vitamin supplements are commenced after completion of the Pabrinex® course**

First Line Prophylactic Vitamin Treatment for Wernicke's encephalopathy:

- High potency B-complex vitamins (Pabrinex® IMHP) – One pair of intramuscular ampoules daily for 5 days

| Prescriber's signature & date: | Date | | | | | |
|---|---|---|---|---|---|---|
| | Nurse's initials | | | | | |

Oral thiamine and vitamin B compound strong (2nd line and after injection course) should be prescribed on the main Drug Prescription and Administration Chart.

| DAY | DOSE | DATE | TIME | GIVEN BY | TIME GIVEN |
|---|---|---|---|---|---|
| **Day 0** | Chlordiazepoxide 15mg | **See notes below for prescribing advice** | | | |
| **Day 1** | Chlordiazepoxide 15mg | | 8am | | |
| | Chlordiazepoxide 15mg | | 1pm | | |
| | Chlordiazepoxide 15mg | | 5pm | | |
| | Chlordiazepoxide 15mg | | 10pm | | |
| **Day 2** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 10mg | | 1pm | | |
| | Chlordiazepoxide 10mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 3** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 10mg | | 1pm | | |
| | Chlordiazepoxide 10mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 4** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 5** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 6** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 7** | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 8** | **STOP** | | | | |

| Prescriber's Signature | | Date | |
|---|---|---|---|

**Day 0** (day of admission) – prescribe up to 15mg 4 to 6 hourly when required on main Drug Prescription and Administration Chart. The dose titrated against the SADQ rating severity of withdrawal symptoms.

**Note: Total dose administered on Day 0 depends on time of admission.**

**Appendix 3b – Severe Detoxification Regime**

**Inpatient drug treatment of detoxification – Age 18 to 65 years**

| **Age 18 to 65 years SEVERE DETOXIFICATION REGIME (SADQ 31-44)** |
|---|

| **Patients name** | |
|---|---|
| NHS Number | |
| Date of Birth | |
| Ward | |

**Pabrinex® and chlordiazepoxide are commenced on the same day, and should also be prescribed on the main drug prescription and administration chart**

**Oral vitamin supplements are commenced after completion of the Pabrinex® course**

First Line Prophylactic Vitamin Treatment for Wernicke's encephalopathy:

- High potency B-complex vitamins (Pabrinex® IMHP) – One pair of intramuscular ampoules daily for 5 days

| Prescriber's signature & date: | Date | | | | | |
|---|---|---|---|---|---|---|
| | Nurse's initials | | | | | |

Oral thiamine and vitamin B compound strong (2nd line and after injection course) should be prescribed on the main Drug Prescription and Administration Chart.

| DAY | DOSE | DATE | TIME | GIVEN BY | TIME GIVEN |
|---|---|---|---|---|---|
| **Day 0** | Chlordiazepoxide 20mg | **See notes below for prescribing advice** | | | |
| **Day 1** | Chlordiazepoxide 20mg | | 8am | | |
| | Chlordiazepoxide 20mg | | 1pm | | |
| | Chlordiazepoxide 20mg | | 5pm | | |
| | Chlordiazepoxide 20mg | | 10pm | | |
| **Day 2** | Chlordiazepoxide 15mg | | 8am | | |
| | Chlordiazepoxide 15mg | | 1pm | | |
| | Chlordiazepoxide 15mg | | 5pm | | |
| | Chlordiazepoxide 15mg | | 10pm | | |
| **Day 3** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 10mg | | 1pm | | |
| | Chlordiazepoxide 10mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 4** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 10mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 5** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 6** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 7** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 8** | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 9** | **STOP** | | | | |

| Prescriber's Signature | | Date | |
|---|---|---|---|

**Day 0** (day of admission) – prescribe up to 20mg 4 to 6 hourly when required on main Drug Prescription and Administration Chart. The dose titrated against the SADQ rating severity of withdrawal symptoms.

**Note: Total dose administered on Day 0 depends on time of admission**

**Appendix 3c – Moderate Detoxification Regime**

**Inpatient drug treatment of detoxification – Age over 65 years**

| **Over 65 years MODERATE DETOXIFICATION REGIME (SADQ 15-30)** |
|---|

| **Patients name** | |
|---|---|
| NHS Number | |
| Date of Birth | |
| Ward | |

**Pabrinex® and chlordiazepoxide are commenced on the same day, and should also be prescribed on the main drug prescription and administration chart**

**Oral vitamin supplements are commenced after completion of the Pabrinex® course**

First Line Prophylactic Vitamin Treatment for Wernicke's encephalopathy:

- High potency B-complex vitamins (Pabrinex® IMHP) – One pair of intramuscular ampoules daily for 5 days

| Prescriber's signature & date: | Date | | | | | |
|---|---|---|---|---|---|---|
| | Nurse's initials | | | | | |

Oral thiamine and vitamin B compound strong (2nd line and after injection course) should be prescribed on the main Drug Prescription and Administration Chart.

| DAY | DOSE | DATE | TIME | GIVEN BY | TIME GIVEN |
|---|---|---|---|---|---|
| **Day 0** | Chlordiazepoxide 10mg | **See notes below for prescribing advice** | | | |
| **Day 1** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 2** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 3** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 4** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 5** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 6** | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 7** | **STOP** | | | | |

| Prescriber's Signature | | Date | |
|---|---|---|---|

**Day 0** (day of admission) – prescribe up to 10mg 4 to 6 hourly when required on main Drug Prescription and Administration Chart. The dose titrated against the SADQ rating severity of withdrawal symptoms.

**Note: Total dose administered on Day 0 depends on time of admission**

**Appendix 3d – Severe Detoxification Regime**

**Inpatient drug treatment of detoxification – Age over 65 years**

| **Over 65 years SEVERE DETOXIFICATION REGIME (SADQ 31-44)** |
|---|

| **Patients name** | |
|---|---|
| NHS Number | |
| Date of Birth | |
| Ward | |

**Pabrinex® and chlordiazepoxide are commenced on the same day, and should also be prescribed on the main drug prescription and administration chart**

**Oral vitamin supplements are commenced after completion of the Pabrinex® course**

First Line Prophylactic Vitamin Treatment for Wernicke's encephalopathy:

- High potency B-complex vitamins (Pabrinex® IMHP) – One pair of intramuscular ampoules daily for 5 days

| Prescriber's signature & date: | Date | | | | | |
|---|---|---|---|---|---|---|
| | Nurse's initials | | | | | |

Oral thiamine and vitamin B compound strong (2nd line and after injection course) should be prescribed on the main Drug Prescription and Administration Chart.

| DAY | DOSE | DATE | TIME | GIVEN BY | TIME GIVEN |
|---|---|---|---|---|---|
| **Day 0** | Chlordiazepoxide 15mg | **See notes below for prescribing advice** | | | |
| **Day 1** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 10mg | | 1pm | | |
| | Chlordiazepoxide 10mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 2** | Chlordiazepoxide 10mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 10mg | | 10pm | | |
| **Day 3** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 1pm | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 4** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 5pm | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 5** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 6** | Chlordiazepoxide 5mg | | 8am | | |
| | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 7** | Chlordiazepoxide 5mg | | 10pm | | |
| **Day 8** | **STOP** | | | | |

| Prescriber's Signature | | Date | |
|---|---|---|---|

**Day 0** (day of admission) – prescribe up to 15mg 4 to 6 hourly when required on main Drug Prescription and Administration Chart. The dose titrated against the SADQ rating severity of withdrawal symptoms.

**Note: Total dose administered on Day 0 depends on time of admission**

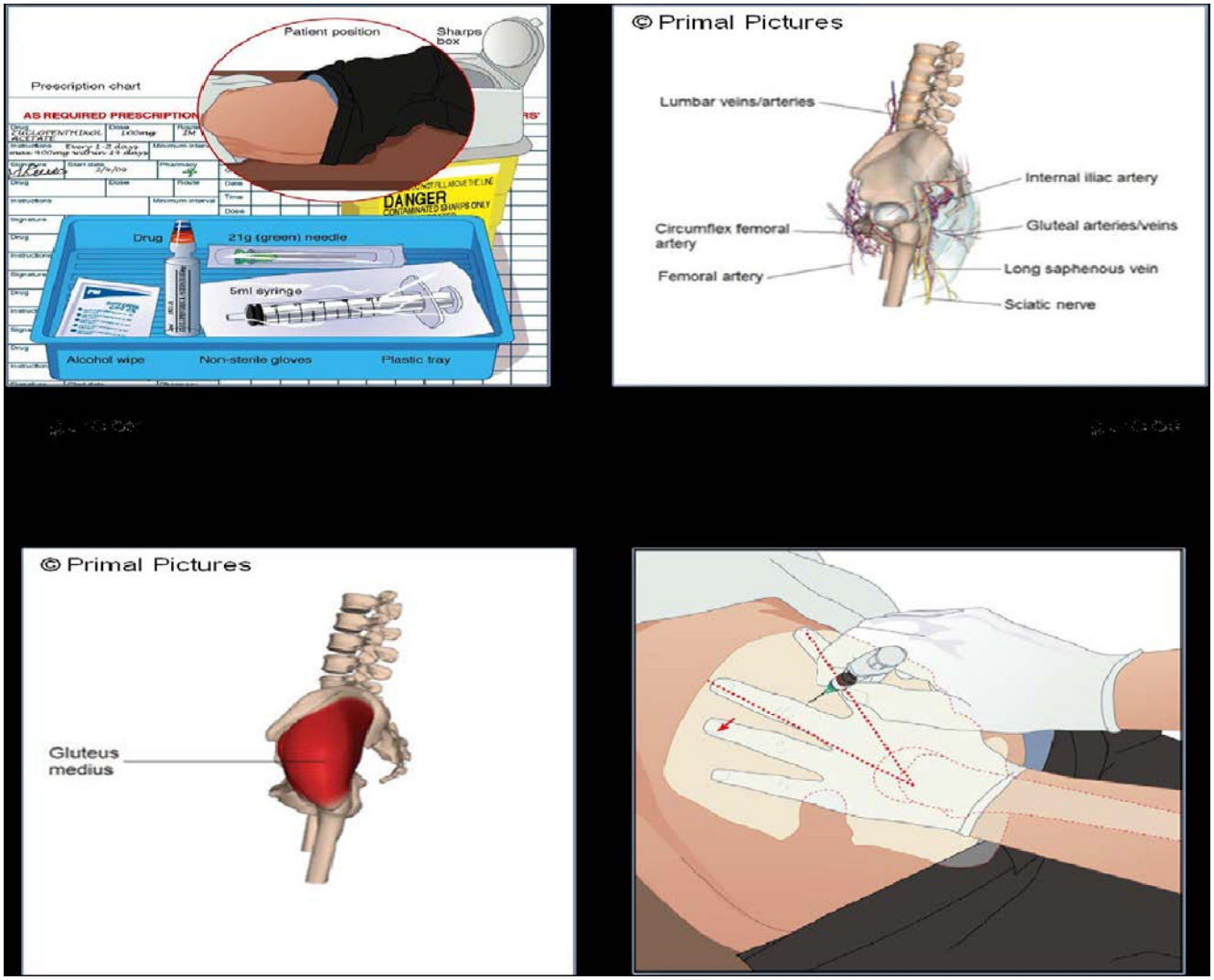
**Appendix 4 - Table showing benzodiazepine equivalents used in alcohol detoxification**

| Name of drug | Dose equivalent | Half life (range) | Duration of detectability |
|---|---|---|---|
| Diazepam | 5mg | 32hrs (21 to 50) | 36 to 200hrs |
| Chlordiazepoxide | 15mg | 12hrs (6 to 30) | 36 to 200hrs |
| Oxazepam | 15mg | 8hrs (5 to 15) | - |
| Lorazepam | 500micrograms | 12hrs (8 to 25) | - |

## Appendix 5 - Administration of IM Pabrinex®

### Background

- Pabrinex® should only be administered where suitable basic life support facilities are available. It is recommended that nursing staff administer Pabrinex® IM only if there is anaphylaxis equipment available (Anaphylaxis training is currently being reviewed across the Trust). The contents of one ampoule number 1 and one ampoule number 2 of Pabrinex® IM injection (total 7mL) should be drawn up into a syringe to mix them just before use. The preparation is designed to be given as a single injection though the volume is quite high (7mL). This may be split if necessary but only after mixing ampoules;
- Licensed practice is to administer a single 7mL injection unless patient preference / clinical need (i.e. reduced muscle mass) requires splitting the dose (see appendix 6 for split dose injections).Pabrinex® should be given as an intra-muscular injection via ventrogluteal site (gluteal muscle, 5cm below the iliac crest) as indicated below in diagram, using the Z - track injections technique;
- Accurate land-marking of the ventrogluteal (VG) site is achieved from a side lying position.




Reproduced from: Guidance on the Administration to Adults of Oil-based Depot and other Long-Acting Intramuscular Antipsychotic Injections 3rd Edition (Sept 2011).
**URL link below**
http://www2.hull.ac.uk/fhsc/PDF/Injection%20SOP%202011%20(3rd%20Edition).pdf

**NB - Remove Fingers prior to injection**

Equipment required:

- Equipment. Sterile packed, in date;
- Pabrinex® I/M HP1 & 2 - supplied in two vials;
- 10mL syringe;
- 2 Filter needles;
- 1 to 2 needles for administration, long enough to ensure I.M injection. 21G (green);
- Gloves;
- Alcohol swabs for site cleaning;
- Plasters;
- Sharps bin;
- Appropriate equipment ('Shock Pack') for the management of anaphylaxis (containing adrenaline 1:1000 1mg/mL).

Preparation:

- Check correct medication, amount of medication and expiry dates on vials;
- Snap open tops;
- Draw contents into a 10mL syringe to mix. Total volume 7mLs;
- Renew the needle on to the barrel so that the syringe has a fresh needle.

Administration

- Confirm patient identity;
- Ask patient to lie on bed in prone position – explain to patient that you will position him/her to decrease discomfort of injection. Position patient in prone or front lying position after correct land marking of VG site. Ask patient to point toes inwards (this internal rotation of femur causes relaxation of the gluteal muscle which decreases discomfort of injection;
- Select and prepare injection site;
- Clean site using alcohol swab in circular motion of 5cm, for 30 seconds. Allow to dry;
- Put gloves on. With thumb and finger of non dominant hand gently stretch back skin and hold taut;
- Remove needle sheath. Position at 90 degrees to skin surface away from skin;
- Inform patient that they will notice injection;
- Quickly and smoothly thrust the needle through the skin and subcutaneous tissue in to the deep muscle;
- Support syringe and check for blood by slowly pulling back plunger, if no blood appears slowly inject the appropriate volume. Inject fluid slowly at a rate of 1mL per 10 seconds (Mitchell & Whitney 2001);
- Remove needle and allow skin to relax;
- Apply plaster unless they have an allergy. If allergic, an appropriate alternative dressing should be applied.

Aftercare:

- Observe for anaphylactic- type reaction for 10 minutes;
- Discard equipment safely;
- If repeatedly injecting vary sites as much as possible and avoid previous sites by 2.5cm;
- Ice can be used to numb the injection site, or lower pain if appropriate for patient comfort.

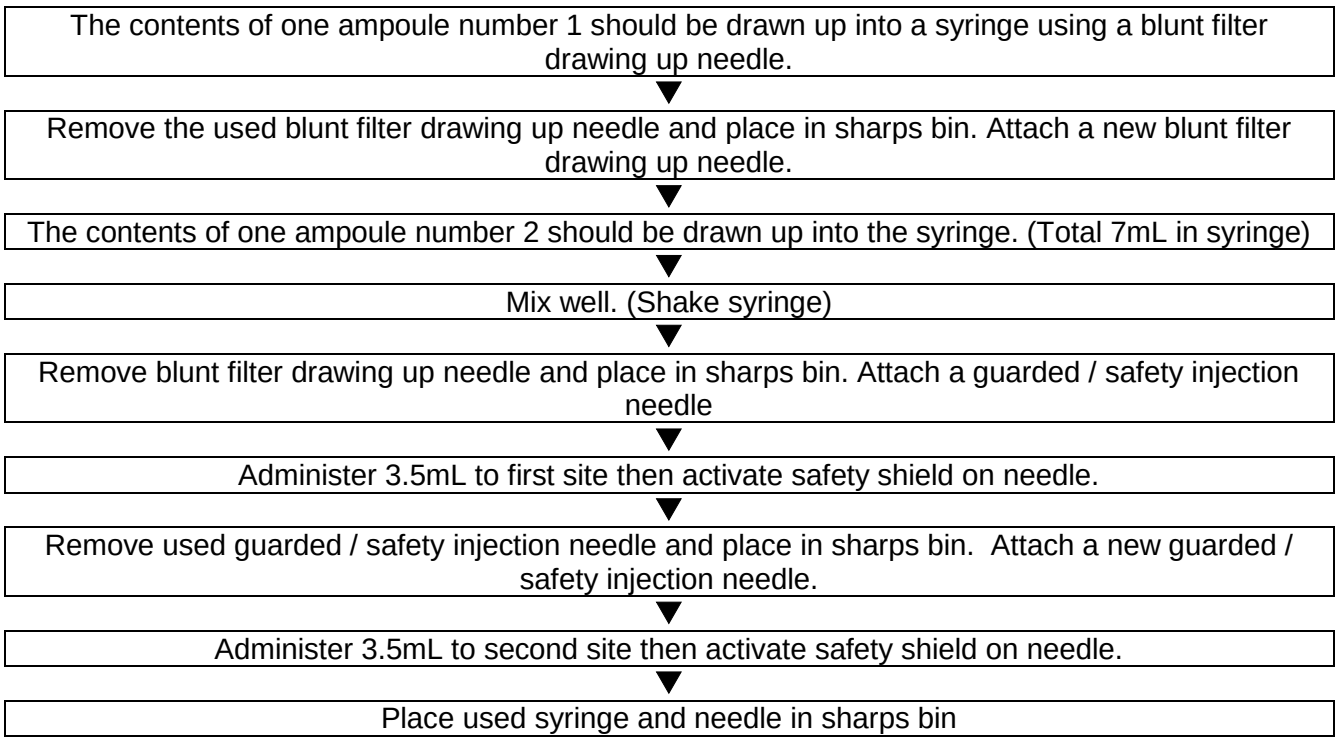
Adverse Reactions:

- Anaphylactic reactions with IM thiamine are rare but nurses must be able to demonstrate competence in handling anaphylaxis situations;
- Hypotension;
- Paraesthesia;
- Pain, redness and swelling at site of injection.

Documentation:

- IM Pabrinex® must be prescribed in the prescription card. When the detoxification regime is completed, a copy of the completed detoxification regime should be supplied to the locality pharmacy team to support the policy audit process.

**Appendix 6 - Flowchart for guidance on best practice for administering divided doses of IM Pabrinex® (Off-label use)**



**Appendix 7 - Clinical Institute Withdrawal Assessment of Alcohol Scale (CIWA –Ar)**

| | | | |
|---|---|---|---|
| **Patient name** | | **Patient NHS No** | |
| **Date of Birth** | | **Starting date of detoxification** | |

| Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 | Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 |
|---|---|---|---|---|---|---|---|---|---|
| **Nausea & Vomiting**<br>(Ask –'do you feel sick to your stomach? Have you Vomited?) | | | | | **Tremor – Arms extended and fingers spread apart** | | | | |
| 0. No nausea / vomiting | | | | | 0. No tremor | | | | |
| 1. Mild nausea with no vomiting | | | | | 1. Not visible, but can be felt fingertip to fingertip | | | | |
| 2. | | | | | 2. | | | | |
| 3. | | | | | 3. | | | | |
| 4. Intermittent nausea with dry heaves | | | | | 4. Moderate, with patient's arm extended | | | | |
| 5. | | | | | 5. | | | | |
| 6. | | | | | 6. | | | | |
| 7. Constant nausea, frequent dry heaves and vomiting | | | | | 7. Severe even with arms not extended | | | | |
| **Level of consciousness**<br>(Ask 'what day is this/ where are you/ Who am I') | | | | | **Auditory disturbances**<br>(Ask 'are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing you? Are you hearing things you know are not there)? | | | | |
| 0. Orientated & can do serial additions | | | | | 0. Not present | | | | |
| 1. Cannot do serial additions / is uncertain about date | | | | | 1. Very mild harshness / ability to frighten | | | | |
| 2. Disorientated for date by no more than 2 calendar days | | | | | 2. Mild harshness / ability to frighten | | | | |
| 3. Disorientated for date by more than 2 calendar days | | | | | 3. Moderate harshness / ability to frighten | | | | |
| 4. Disorientated for place / person | | | | | 4. Moderately severe hallucinations | | | | |
| **Tactile Disturbances**<br>(Ask 'Have you any itching, pins & needles sensations, any numbness / do you feel bugs crawling on / under your skin?) | | | | | **Sweating** | | | | |
| 0. None | | | | | 0. No sweating | | | | |

| Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 | Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 |
|---|---|---|---|---|---|---|---|---|---|
| 1. Very mild itching, pins & needles, burning / numbness | | | | | 1. Barely perceptible sweating, palms moist | | | | |
| 2. Mild itching, pins & needles, burning / numbness | | | | | 2. | | | | |
| 3. Moderate itching, pins & needles, burning / numbness | | | | | 3. | | | | |
| 4. Moderately severe hallucinations | | | | | 4. Beads of sweat obvious on forehead | | | | |
| 5. Severe hallucinations | | | | | 5. | | | | |
| 6. Extremely severe hallucinations | | | | | 6. | | | | |
| 7. Continuous hallucinations | | | | | 7. Drenching sweats | | | | |
| **Agitation** | | | | | **Anxiety**<br>(Ask 'do you feel nervous?) | | | | |
| 0. Normal activity | | | | | 0. No anxiety. at ease | | | | |
| 1. Somewhat more than normal activity | | | | | 1. Mild anxiety | | | | |
| 2. | | | | | 2. | | | | |
| 3. | | | | | 3. | | | | |
| 4. Moderately fidgety and restless | | | | | 4. Moderately anxious, or guarded, so anxiety is inferred | | | | |
| 5. | | | | | 5. | | | | |
| 6. | | | | | 6. | | | | |
| 7. Paces back & forth during most of the interview, or constantly thrashes about | | | | | 7. Equivalent to acute panic states as seen in severe delirium | | | | |
| **Visual Disturbances**<br>(Ask 'does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing anything that is disturbing you? Are you seeing things you know are not there?') | | | | | **Headache, Fullness in head**<br>(Ask 'does your head feel different? Does it feel like there is a band around your head)? | | | | |
| 0. Not present | | | | | 0. Not present | | | | |
| 1. Very mild sensitivity | | | | | 1. Very mild | | | | |
| 2. Mild sensitivity | | | | | 2. Mild | | | | |
| 3. Moderate sensitivity | | | | | 3. Moderate | | | | |
| 4. Moderately severe hallucinations | | | | | 4. Moderately severe | | | | |
| 5. Severe hallucinations | | | | | 5. Severe | | | | |
| 6. Extremely severe hallucinations | | | | | 6. Very severe | | | | |

| Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 | Please score one number in each case | Day 1 | Day 2 | Day 3 | Day 4 |
|---|---|---|---|---|---|---|---|---|---|
| 7. Continuous hallucinations | | | | | 7. Extremely severe | | | | |

| A total score of <10 continue as per regime score of 33+ indicates concern – consult the doctor<br>**Total – CIWA-AR maximum score is 67** | **Total score** | **Day 1** | **Day 2** | **Day 3** | **Day 4** |
|---|---|---|---|---|---|
| | | | | | |

| Date | CIWA-AR score | BAC | BP | Pulse | Temp | Comment |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Note: Up to 4 consecutive days of withdrawal symptoms can be recorded and evaluated.

## Appendix 8 - Glossary

| | |
|---|---|
| **AST** | Aspartate aminotransferase - an enzyme normally present in body serum and in certain body tissues, especially those of the heart and liver. |
| **Dupuytren's contracture** | Dupuytren's contracture is a condition that affects the hands and fingers. It causes one or more of the fingers, on one or both hands, to bend into the palm of the hand. |
| **GGT** | Gamma-glutamyl transpeptidase - is an enzyme produced by the liver. It is used to diagnose obstructions in the biliary system, pancreatitis and liver disease. GGT may also be elevated in liver and pancreatic cancer as well as alcoholism. |
| **Gynaecomastia** | Gynaecomastia is a condition that causes boys' and men's breasts to swell and become larger than normal. |
| **Hyperreflexia** | Disordered response to stimuli characterised by exaggeration of reflexes. |
| **MCV** | Mean cell volume - Mean corpuscular volume (MCV) is the average volume of red cells in a specimen. MCV is elevated or decreased in accordance with average red cell size; i.e. low MCV indicates microcytic (small average RBC size), normal MCV indicates normocytic (normal average RBC size), and high MCV indicates macrocytic (large average RBC size). |
| **Palmer erythema** | A reddening of the skin on the palmer aspect of the hands. |
| **Parotid gland** | One of the salivary glands. |
| **Spider naevi** | A dilation of superficial capillaries with a central red dot from which blood vessels radiate. |
| **Telangectasia** | Chronic dilation of groups of capillaries causing elevated dark red blotches on the skin. |
| **Tachycardia** | Abnormally rapid heart rate. |