

Nottinghamshire Primary Care Alcohol Dependence Guidelines

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Summary

This guideline has been widened from its initial remit of providing guidance to primary care clinicians to manage alcohol detoxification safely and appropriately to also giving guidance of the management of dependent drinkers. There are specific appendices on each of the medications used for those with a history of alcohol dependence. It also gives information for signposting further support. It would **not** normally be possible for GPs to offer a safe community detoxification fulfilling the criteria in this guideline. If a dependent drinker does present in an acute state of alcohol withdrawal with shakes and sweats, it would be advisable for them to have the minimum amount of alcohol to ease withdrawal symptoms until a planned detoxification or more controlled reduction can take place. Referrals should be made to appropriate services in the local area (see *more information* below).

Some notes on alcohol:

- All parts of the body are adversely affected by alcohol- if you drink enough for long enough
- Intoxication and poisoning is rapid
- Most diseases take time to develop
- These include chronic liver disease, hypertension (but also myocardial infarction and stroke), diabetes, obesity and hyperlipidaemia
- Alcohol commonly also causes or aggravates gastro-intestinal problems such as Oesophagitis, gastritis, peptic ulceration, pancreatitis
- **Mental health:** It is often the case that alcohol misuse is a way the person uses to cope with underlying anxiety and depression. Addressing mental health difficulties and the alcohol misuse should be done in partnership wherever possible
- **Alcohol-related brain injury (ARBI):** is an umbrella term encompassing presentations such as alcohol dementias, Wernicke's encephalopathy and Korsakoff's syndrome. There is a move towards viewing these as a spectrum, rather than discrete disorders.
ARBI results from prolonged and harmful drinking. Unlike the dementias, abstinence can see improvements in cognition in up to 75%. There is usually anterograde amnesia and impaired executive functioning, but when irreversible brain damage occurs the long term memory can be affected. Korsakoff's can present with characteristic confabulation in c. 20%.

Medication for dependent drinkers:

Whilst still drinking heavily, it is very important that any dependent drinkers are given adequate doses of **thiamine** as a harm reduction measure. This is because alcohol depletes the body's store of thiamine and deficiency states such as Wernicke's encephalopathy can be fatal; these can be triggered by a sudden withdrawal which may not occur in a planned detoxification but if for example someone suddenly runs out of money or is arrested. Depending on the degree of dependency and nutritional status, doses of 100-300 mg thiamine are recommended: NICE & BNF advise 100mg three times a day for severe deficiency but 100mg daily is a reasonable dose for ongoing mild deficiency/ maintenance; however high risk groups with poor diets may require parenteral thiamine followed by oral (see **appendix L** for more detail).

Post detoxification (this may include those who have managed to safely stop drinking themselves): Although psychosocial support is arguably more important, there are 3 NICE recommended **relapse prevention** medications in common use to support abstinence: each of these are AMBER 2 on the joint formulary so would normally be expected to be initiated by specialist services (unless GPs/NMPs have appropriate training) but they can then be continued by primary care as appropriate.

They are each covered in detail in the appendices: I - M:

1. Disulfiram (“Antabuse”)- used as a deterrent since drinking within 24 hours of taking this leads to a build-up of toxic acetaldehyde causing a very unpleasant systemic reaction that may require hospitalisation. Care should therefore be taken in initiating this to make sure the individual is abstinent; it is therefore usually given with an initial 2 week supervision period with daily breathalysing.
2. Naltrexone is an opioid antagonist that also supports controlled drinking or abstinence, probably by reducing the enjoyment of alcohol.
3. Acamprosate promotes abstinence (it’s not certain how, but it may reduce cravings for alcohol in some patients); whatever the mechanism it is probably no longer effective if a patient returns to regular drinking.

Referral information:

City Alcohol Service:

NRN (Nottingham Recovery Network)

<https://www.nottinghamrecoverynetwork.com/>

Tel 0800 028 5598 / 0115 970 9590

Patients can self-refer by phone or attend at the Nottingham Wellbeing Hub (73 Hounds Gate, Nottingham, NG1 6BB) where they will be seen for triage on the same day. City primary care clinicians can also call for advice if needed.

For urgent out of hours advice (not scripting) regarding difficult alcohol problems, it is also possible to call the Nurse in charge of Edwin House (01158 441 860).

County Alcohol Service (CGL):

New Directions: Nottinghamshire

<http://www.changegrowlive.org/content/new-directions-county-south>

Tel 0115 896 0798

Patients can self-refer by calling the single point of contact number 24/7 (0115 896 0798). CGL provides services at a variety of satellite locations, by appointments only, across the County including Stapleford, Hucknall, Eastwood, West Bridgford, Arnold and Carlton.

1. Introduction

This protocol was initially developed by the Alcohol Detoxification Clinical group, NHS Nottingham City in 2010 and was the first step to address capacity issues in relation to detoxification programmes in the community. The protocol provides guidelines to primary care clinicians on how to manage alcohol detoxification safely and appropriately. It also provides signposting information for further support. It would not normally be possible for GPs to offer a safe community detoxification fulfilling the criteria in this guideline. As such, it is advisable for specialist services for the local area to be contacted prior to initiation of a community detoxification:

NHS Nottingham City:

Referrals should be made via the single point of access (NRN tel. 0115 970 9590) based at the Nottingham Wellbeing Hub (73 Hounds Gate, Nottingham, NG1 6BB). Anyone with a problem with alcohol or other drugs is seen on the same day they present and offered a specialist assessment within five days. For patients who are considered suitable for supervised community detoxification this will be arranged by NRN in a timely way, usually within a few weeks.

NHS Nottinghamshire County:

In the County, New Directions operate as the integrated Nottinghamshire Drug and Alcohol Service (tel 0115 896 0798) and patients/primary care should refer to them first before embarking on any detoxifications.

2. Scope

This guideline is firstly to demonstrate what a safe community detoxification looks like; most will be unable to do this without the support of specialist alcohol services. Rarely the guidance can be used to support primary care prescribers who are already undertaking detoxification programmes in primary care or those who wish to start. Prescribers should, however, only prescribe if they feel competent to do so. Perhaps the most useful aspect of the guideline for the majority of primary care clinicians is in the appendices, where there are details of medications used for alcohol dependence. Most of these medicines are useful for relapse prevention with the aim of preventing serial detoxifications which can themselves be harmful.

It should be noted that there are differences in provision of specialist services north and south of the county in relation to alcohol detoxification programmes. See details above in the introduction.

3. Aims of Community Detoxification

The principle aims of community alcohol detoxification are:

- To allow patients who are dependent on alcohol to stop drinking safely
- To allow patients to stay in the community so long as it is safe to do so
- To provide advice and support to the patient and significant others involved in or affected by the patient's detoxification.

4. Identifying suitable patients

Patients who are dependent on alcohol and wish to **stop** (rather than just reduce) drinking, who meet the criteria below:

Inclusion criteria:

- Regular heavy drinker with expected AUDIT score >20 (usually >15 units a day for men, >10 units a day for women, to a maximum of around 30 units/day) who has recently needed to drink to prevent withdrawal symptoms (see appendix A and B). For people drinking above 30 units daily, aim to reduce alcohol to below 30 units before commencing detoxification.
- Not had alcohol detoxification for at least 3-6 months.
- Competent carer available to provide support, and encouragement, supervise medication and obtain medical help should it be needed, and willing to stay with them 24 hrs/day for five days.
- Appropriate care arrangements have been put in place for any children and vulnerable adults.
- Patient agrees to daily clinical supervision for five days.
- Patient agrees to being breathalysed daily.
- Patient agrees to have liver function tests (LFTs) before and possibly after community detoxification.

Exclusion criteria:

- History of complicated withdrawal e.g. delirium tremens (DTs), fits.
- Patient confused or has hallucinations.
- Patient using benzodiazepines.
- Patient has epilepsy/history of recent fits.
- Patient is malnourished and at risk of Wernicke's encephalopathy.
- Patient has as severe diarrhoea/vomiting.
- Patient is at risk of suicide.
- Patient has an acute or poorly controlled physical or mental illness (NB caution with elderly; debilitated; hypertension; coronary heart disease; significant liver or renal impairment; diabetes)
- **Pregnancy** (contact specialist midwives (they cover city & county) 0115 8831748. Rosie Allright on 07812 268771/ Wendy Anderson on 07812 268308.
- Problem drug use (caution if prescribed substitute opiates).
- Patient has an environment not conducive to abstinence.
- Multiple previous unsuccessful community detoxifications.
- Significant childcare risk issues.

For those not suitable for community detoxification, consider referral to a specialist alcohol service. If there are any safeguarding concerns in relation to children and/or vulnerable adults, follow your agency's safeguarding procedures.

5. Medical risks of community detoxification

- **Grand mal seizure**
Alcohol withdrawal can lead to grand mal fits, which may occasionally be fatal
- **Delirium tremens**
Alcohol withdrawal can lead to delirium tremens (DTs) which can be fatal
- **Overdose**
Taking alcohol and benzodiazepines together in large doses can lead to fatal overdose

- **Suicide**

Patients may become emotionally labile during this detoxification and be at increased risk of suicide

- **Wernicke's encephalopathy**

Alcohol withdrawal in the presence of thiamine deficiency can lead to Wernicke's encephalopathy, which is reversible if it is caught in time. A presumptive diagnosis should be made if:

- Severe confusion-this is by far the most common [and may be the only] symptom. Patient may appear more drunk than expected, not responding to chlordiazepoxide alone in adequate doses.
- Ataxia
- Ophthalmoplegia / nystagmus
- Hypothermia and hypotension
- Memory disturbance
- Coma/unconsciousness

- **Kindling**

Grand mal fits in withdrawal are thought to cause a 'kindling' effect, in which alcohol withdrawals are more readily complicated by fitting in future detoxification. This is why it can be dangerous to have multiple or serial detoxification.

6. Risk reduction

- Patient must be looked after by a competent carer 24 hours a day for the first five days.
Patient must be seen daily for the first five days by a GP/PN competent to assess severity of withdrawals. Patients must be assessed for onset of Wernicke's and if suspected admitted to hospital immediately.
- The GP should issue a daily prescription for chlordiazepoxide after each assessment.
- The patient should be breathalysed daily during the detoxification to exclude relapse
- Benzodiazepines should be stopped immediately if the patient relapses
- Patients should be given high-dose thiamine as part of pre-detoxification package
- Sufficient benzodiazepines should be given to prevent fitting
- Carer is instructed regarding emergencies-contact GP within hours, NHS 111 out of hours, 999 if patient fitting
- Full childcare risk assessment documented prior to detoxification

7. Record keeping

Full clinical notes should be recorded on the GP records, including any safeguarding issues.

Information may be required for clinical governance by the ICB; please use appropriate READ codes - suggest "alcohol detoxification"

8. Equipment

Breathalyser – would be essential if attempting to supervise a community detoxification but may also be useful to assess dependent drinkers on an ongoing basis – relative values are often more useful than absolutes since long term dependent drinkers may be able to have very high breath levels without being significantly intoxicated.

9. Preparation for home detoxification

- Confirm level of drinking and review inclusion/exclusion criteria- this protocol assumes the GP has already explored the use of drink diaries and other techniques to gradually reduce alcohol intake and concluded with the patient that abstinence is the best option.
- Consider completing Severity of Alcohol Dependence Questionnaire (SADQ, see appendix C).

- Consider urine drug screening for other substance misuse.
- Confirm understanding of community detoxification and agree goal of abstinence. Complete care agreement (appendix E).
- Plan date for detoxification to start on a Monday/Tuesday -patient need not be alcohol free (it may raise risk of seizures for very heavy drinkers) but advise cautious reduction with a safe breathalyser amount such as <0.90 mg/l Breath Alcohol concentration before start of detoxification).
- Ensure psychosocial support from appropriate alcohol agency has commenced and that patient has care plan.
- Ensure 24 hour care at home for five days from competent carer.
- Ensure daily medical support is in place.
- Ensure other support services (such as social worker) are aware of detoxification.
- Provide written information sheet for patient, for pharmacy and for carer (see appendices F, G, H respectively).
- Ensure the pharmacy of patient's choice is aware of detoxification and has adequate medication in stock.
- Advise patient to start slowly reducing alcohol intake prior to detoxification.
- Prescribe thiamine at initial assessment and for at least three days prior to detoxification.
- Give full information on and agree aftercare including mutual aid support, e.g. Alcoholics Anonymous / Self-management and Recovery Training and relapse prevention treatments, e.g. disulfiram.
- Ensure the potential impact to children and vulnerable adults has been assessed prior to detoxification and support services / care arrangements have been put in place.
- Provide written information for carer support e.g. Explore Family.
- Liver Function Tests & Full Blood Count.

10. MEDICATION (see appendices I to M)

i. Vitamins:

- **Thiamine** 100mg three times a day (commence 3 days prior to detoxification and continue for 4 weeks or until adequate dietary intake post detoxification).
- **Thiamine Hydrochloride 50mg/ml solution for injection (5ml ampoule)** – parenteral B vitamins by **INTRAMUSCULAR** (not IV) injection are thought to be safer than oral for any with poor nutrition who may be at risk of Wernicke's encephalopathy; ideally 3-5 doses IM over ten days in practices able to offer this treatment. NB - there is negligible risk of anaphylaxis. **See appendix L for more details.**

In circumstances where there is considerable risk that a patient may be at risk of Wernicke's, it may be appropriate for Non-Medical Prescribers to prescribe and give IM thiamine hydrochloride 50mg/ml (5ml ampoule) urgently (provided they are operating within their sphere of competence and a licensed preparation has been sourced). If in any doubt they should consult with relevant medical expertise.

ii. Chlordiazepoxide:

- At least 4 hours between doses.
- Not to be taken if started drinking again, or if used sedating drugs e.g. heroin, methadone, or non-prescribed benzodiazepines.
- Other medication may occasionally be required for control of symptoms such as diarrhoea and vomiting and itching.
- Tailor dose to age, sex, and level of drinking prior to detoxification.

Note: It is not appropriate to give maintenance of this (or any other) benzodiazepine for those with an alcohol dependency. Any exception to this should be well documented with reasons why.

Daily medical assessment during detoxification

- Patient to attend daily from Mon-Fri and a week after starting, ideally with their carer. Further review thereafter depending on clinical need.
- Breathalyse patient each attendance to ensure alcohol free,
- Clinician to monitor withdrawal signs and symptoms (can use CIWA-Ar chart (see appendix D) as a guide)-may need to add extra dose of chlordiazepoxide titrated to withdrawal symptoms
- Clinician to monitor impact of detoxification on mental health as it may exacerbate any pre-existing stress/anxiety. They may have been using alcohol to block out painful memories, which they may now find themselves re-living.
- Clinician may also need to assess physical state watching for other causes of confusion, such as pneumonia rather than alcohol withdrawal.
- Responsibility to ensure effective monitoring rests with prescriber.
- Daily prescription to be issued (with Fri, Sat, and Sun given on Friday's visit) with clear instructions. Ensure the patient and carers understand the need to store medications away where children cannot see or reach them.
- Encourage daily activity, coping strategies, and address psychosocial issues.

11. Relapse prevention/Follow up

It is essential for all those undergoing detoxification within primary care to have **ongoing psychosocial support** arranged, preferably before commencing the detoxification. Psychosocial interventions are a broad approach to help a person who misuses alcohol or drugs to stop using them or remain abstinent. It involves using psychological treatments and may include other techniques (such as self-help, therapies involving families and carers, incentive programmes, and education about drug problems). Locally, these can be provided by [NRN](#), or voluntary agencies such as [Double Impact](#) or [Alcoholics Anonymous](#) (AA).

It is also important that children and families are supported. Consider notifying the child's health visitor, school nurse and/or a referral to CGL JIGSAW – drug and alcohol services for young people under 18 including specialist family support for children and adults impacted by substances. Tel: 0115 9484 314 or email jigsaw@cgl.org.uk.

There are three (NICE recommended) medications used to help maintain abstinence as part of a psychosocial programme in motivated patients - disulfiram, acamprosate or naltrexone which can be considered once detoxification is complete (see the Appendixes I, K and M for more details on each or NICE guideline CG115); all are Amber 2 drugs on the traffic lights formulary which means they would generally be started by a specialist alcohol service (i.e. NRN) but can be safely continued by any GP, or initiated by GPs operating within their competence, and with reference to this guideline.

It is vital to recognise that patients may be at their most vulnerable to relapse, and to mental health problems such as depression and anxiety, immediately following detoxification. Hence regular clinical review over the following four weeks is advised. Consider referral to primary care based psychological therapies psychiatric referral. Antidepressants may be appropriate - alcohol may have masked depression in some people or contributed to depression in others.

12. Reducing alcohol consumption in people with alcohol dependence

Some alcohol dependent patients do not want detoxification and may feel if they are not having withdrawal symptoms that it is unnecessary. Some may feel that abstinence is unrealistic (for example if they have fragile home circumstances or live/associate with other dependent drinkers); however they may aspire to a detoxification/abstinence in the future when social circumstances are more conducive. In the meantime they may want to try to reduce or better control their drinking. As with all parts of the alcohol misuse spectrum, the most

successful management lies in psychosocial support to help change behaviour but there may be some additional benefit of medication.

Nalmefene has been recommended by NICE ([TA 325](#)) as an option for reducing alcohol consumption, for people with alcohol dependence. However this should only be prescribed in conjunction with continuous psychosocial support focused on treatment adherence and reducing alcohol consumption. Locally, we feel that identifying whether nalmefene is appropriate for an individual is best undertaken by the specialist alcohol misuse services. They may recommend practices to prescribe it in a small number of patients for whom they feel it would be beneficial (it is unlikely to be prescribed by NRN unless the practice is willing to continue it if successful). For this reason, it has not been included in these guidelines, though an information sheet can be found on the Area Prescribing Committee website.

NRN do also on occasions make use of Naltrexone (which as an opioid receptor antagonist is very similar to Nalmefene) for those who are wanting to reduce or stop their drinking but although commonly used by specialists in this regard, it is licensed for relapse prevention and the British National Formulary advises stopping naltrexone if drinking continues 4-6 weeks after starting treatment. **Primary care clinicians may be asked to prescribe naltrexone, but only after it has been initiated by a specialist.**

13. Potentially difficult situations

i. Self-Detoxification

If an alcohol dependent patient presents having suddenly stopped drinking and is experiencing withdrawal symptoms, firstly assess the severity of withdrawal symptoms. If DTs or signs of Wernicke's encephalopathy, admit immediately.

ii. Detoxification failure

If no withdrawal symptoms, then assess the patient for suitability of community detoxification. If the patient is suitable, it may be possible to continue the community detoxification using the protocol above. If, however, the patient has any exclusion criteria, they should be advised that it is unsafe to continue the alcohol detoxification in a community setting and that a temporary return to drinking at the lowest level they can manage may be safer for them at this stage to prevent/reduce any risk of fitting. *Be careful how you put this - it is unwise to be seen to be actively encouraging the patient to drink; this is usually remembered as unhelpful later on.*

Stop the detoxification if:

- The patient starts drinking again during detoxification
- The care agreement is broken e.g. failure of patient to attend daily medical assessment appointment

Where a detoxification stops, the impact on a child or vulnerable adult needs to be reassessed and appropriate action taken.

iii. Relapse

If the patient relapses after completion of detoxification, discuss with patient the future plan of action and whether to refer to NRN/ NRN.

It is important to recognise the impact of relapse on children particularly if this is not their first experience of their parent accessing treatment. Any children who may be affected should be linked into support either from family or children's services.

iv. Not suitable for GP detoxification

Please refer to NRN (0115 970 9590) who will assess the most suitable option re: detoxification if appropriate.

v. Advice for medical staff during detoxification

Consider phoning NRN (0115 970 9590) or Edwin House (01158 441 860). For further information of Nottingham drug & alcohol agencies see Crime & Drugs Partnership website: www.nottinghamcdp.com under drugs & alcohol tab.

14. References and sources of information used in the development of this protocol:

- Miller W, (2002). Mesa Grande: a methodological analysis of clinical trials for the treatment of alcohol use disorders. *Addiction* 97:265-277
- NTA Review of the effectiveness of treatment for alcohol problems. Duncan Raistrick, Nick Heather and Christine Godfrey (2006), <http://www.nta.nhs.uk>
- NICE Alcohol-use disorders: CG115: diagnosis, assessment and management of harmful drinking and alcohol dependence www.nice.org.uk
- Scottish Intercollegiate Guidelines Network (SIGN). The management of harmful drinking and alcohol dependence in primary care. Edinburgh: SIGN; 2003. (SIGN publication no. 74). [Cited 22 Jul 2008]. Available from: <http://www.sign.ac.uk/guidelines/fulltext/74/>
- NICE TA325: [Nalmefene for reducing alcohol consumption in people with alcohol dependence 2014](#)
- WHO (2001) – [AUDIT – The Alcohol Use Disorders Identification Test](#), hosted here: [link](#)
- SIGN Guideline No 74 The management of harmful drinking and alcohol dependence in primary care, September 2003.
- Lingford-Hughes A *et al*. Evidence-based guidelines for the pharmacological management of substance misuse, addiction and co-morbidity: recommendations from the British Association for Psychopharmacology. *J Psychopharmacology* 2012; 0:1-54 available [here](#)
- Kiefer F, Jahn H, Tarnaske T, Helwig H, Briken P, Holzbach R, Kampf P, Stracke R, Baehr M, Naber D, Wiedemann K (2003). Comparing and combining naltrexone and acamprosate in relapse prevention of alcoholism. *Arch Gen Psych*;60:92-99.
- Miller W, (2002). Mesa Grande: a methodological analysis of clinical trials for the treatment of alcohol use disorders. *Addiction* 97:265-277
- Rosner S, Leucht S, Leher P, Soyka M (2008). Acamprosate supports abstinence and naltrexone prevents excessive drinking; evidence from a meta-analysis with unreported outcomes. *J Psychopharmacology*;22(1):11-23
- Minozzi S, Amato L, Vecchi S, Davoli M, Kirchmayer U, Verster A. Oral naltrexone maintenance treatment for opioid dependence. *Cochrane Database of Systematic Reviews* 2011, Issue 4. Art. No.: CD001333.
- Summary of Product Characteristics: Adepend 50 mg film-coated tablets AOP Orphan Pharmaceuticals AG (accessed via www.medicines.org.uk/emc last updated 16-Dec-2014
- Leach et al (2017), *Should GPs prescribe vitamin B compound strong tablets to alcoholics?*, *British Journal of General Practice*, March 2017

Appendix A

Diagnostic Criteria for Alcohol Withdrawal

- A. Cessation of (or reduction in) alcohol use that has been heavy and prolonged.
- B. Two (or more) of the following, developing within several hours to a few days after criterion A:
 - 1. Autonomic hyperactivity (e.g., sweating or pulse rate greater than 100 beats per minute)
 - 2. Increased hand tremor
 - 3. Insomnia
 - 4. Nausea or vomiting
 - 5. Transient visual, tactile, or auditory hallucinations or illusions
 - 6. Psychomotor agitation
 - 7. Anxiety
 - 8. Grand mal seizures
- C. The symptoms in criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

Adapted from DSM-IV by Bayard, McIntyre, Hill, Woodside 2004

Appendix B

Symptoms of Alcohol Withdrawal Syndrome

<i>Symptoms</i>	<i>Time of appearance after cessation of alcohol use</i>
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Minor withdrawal symptoms: insomnia, tremulousness, mild anxiety, gastrointestinal upset, headache, diaphoresis, palpitations, anorexia 6 to 12 hours

Alcoholic hallucinosis: visual, auditory, or tactile hallucinations 12 to 24 hours*

Withdrawal seizures: generalized tonic-clonic seizures 24 to 48 hours†

Alcohol withdrawal delirium (delirium tremens): hallucinations (predominately visual), disorientation, tachycardia, hypertension, low-grade fever, agitation, diaphoresis 48 to 72 hours‡

* Symptoms generally resolve within 48 hours.

† Symptoms reported as early as two hours after cessation.

‡ Symptoms peak at five days.

Appendix C

SEVERITY OF ALCOHOL DEPENDENCE QUESTIONNAIRE (SADQ-C)¹

NAME _____ AGE _____

DATE:

Please recall a typical period of heavy drinking in the last 6 months.

When was this? Month:..... Year:.....

Please answer all the following questions about your drinking by circling your most appropriate response. Your score will be calculated by the doctor or nurse.

During that period of heavy drinking

1. The day after drinking alcohol, I woke up feeling sweaty.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
2. The day after drinking alcohol, my hands shook first thing in the morning.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
3. The day after drinking alcohol, my whole body shook violently first thing in the morning if I didn't have a drink.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
4. The day after drinking alcohol, I woke up absolutely drenched in sweat.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
5. The day after drinking alcohol, I dread waking up in the morning.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
6. The day after drinking alcohol, I was frightened of meeting people first thing in the morning
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
7. The day after drinking alcohol, I felt at the edge of despair when I awoke.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
8. The day after drinking alcohol, I felt very frightened when I awoke.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
9. The day after drinking alcohol, I liked to have an alcoholic drink in the morning.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
10. The day after drinking alcohol, I always gulped my first few alcoholic drinks down as quickly as possible
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score
11. The day after drinking alcohol, I drank more alcohol to get rid of the shakes.

ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

12. The day after drinking alcohol, I had a very strong craving for a drink when I awoke
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

13. I drank more than a quarter of a bottle of spirits in a day (OR 1 bottle of wine OR 7 beers)
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

14. I drank more than half a bottle of spirits per day (OR 2 bottles of wine OR 15 beers).
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

15. I drank more than one bottle of spirits per day (OR 4 bottles of wine OR 30 beers).
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

16. I drank more than two bottles of spirits per day (OR 8 bottles of wine OR 60 beers)
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

Imagine the following situation:

1. You have been **completely off drink for a few weeks**
2. You then drink **very heavily** for **two days**

How would you feel the **morning after** those two days of drinking?

17. I would start to sweat.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

18. My hands would shake.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

19. My body would shake.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

20. I would be craving for a drink.
ALMOST NEVER (0) SOMETIMES (1) OFTEN (2) NEARLY ALWAYS (3) score

TOTAL SCORE:

CHECKED BY:

ALCOHOL DETOXIFICATION PRESCRIBED: YES/NO

¹ Stockwell, T., Sitharan, T., McGrath, D.& Lang, . (1994). The measurement of alcohol dependence and impaired control in community samples. Addiction, 89, 167-174.

NOTES ON THE USE OF THE SADQ

The Severity of Alcohol Dependence Questionnaire was developed by the Addiction Research Unit at the Maudsley Hospital. It is a measure of the severity of dependence. The AUDIT questionnaire, by contrast, is used to assess whether or not there is a problem with dependence.

The SADQ questions cover the following aspects of dependency syndrome:

- physical withdrawal symptoms
- affective withdrawal symptoms
- relief drinking
- frequency of alcohol consumption
- speed of onset of withdrawal symptoms.

Scoring

Answers to each question are rated on a four-point scale:

Almost never: 0

Sometimes: 1

Often: 2

Nearly always: 3

A score of 31 or higher indicates "severe alcohol dependence".

A score of 16 -30 indicates "moderate dependence"

A score of below 16 usually indicates only a mild physical dependency.

A chlordiazepoxide detoxification regimen is usually indicated for someone who scores 16 or over.

It is essential to take account of the amount of alcohol that the patient reports drinking prior to admission/assessment as well as the result of the SADQ.

There is no correlation between the SADQ and such parameters as the mean corpuscular volume (MCV) or gamma-glutamyl transferase (GGT).

Appendix D: Alcohol Withdrawal Assessment Scoring Guidelines (the revised clinical institute withdrawal assessment for alcohol (CIWA - Ar) scale)

Nausea/Vomiting - Rate on scale 0 - 7

- 0 – None
- 1 - Mild nausea with no vomiting
- 2
- 3
- 4 - Intermittent nausea
- 5
- 6
- 7 - Constant nausea and frequent dry heaves and vomiting

Tremors - have patient extend arms & spread fingers. Rate on scale 0 - 7.

- 0 - No tremor
- 1 - Not visible, but can be felt fingertip to fingertip
- 2
- 3
- 4 - Moderate, with patient's arms extended
- 5
- 6
- 7 - severe, even w/ arms not extended

Anxiety - Rate on scale 0 - 7

- 0 - no anxiety, patient at ease
- 1 - mildly anxious
- 2
- 3
- 4 - moderately anxious or guarded, so anxiety is inferred
- 5
- 6
- 7 - equivalent to acute panic states seen in severe delirium or acute schizophrenic reactions.

Agitation - Rate on scale 0 - 7

- 0 - normal activity
- 1 - somewhat normal activity
- 2
- 3
- 4 - moderately fidgety and restless
- 5
- 6
- 7 - paces back and forth, or constantly thrashes about

Paroxysmal Sweats - Rate on Scale 0 - 7.

- 0 - no sweats
- 1- barely perceptible sweating, palms moist
- 2
- 3
- 4 - beads of sweat obvious on forehead
- 5
- 6
- 7 - drenching sweats

Orientation and clouding of sensorium - Ask, "What day is this? Where are you? Who am I?" Rate scale 0 - 4

- 0 – Oriented
- 1 – cannot do serial additions or is uncertain about date
- 2 - disoriented to date by no more than 2 calendar days
- 3 - disoriented to date by more than 2 calendar days
- 4 - Disoriented to place and / or person

Tactile disturbances - Ask, "Have you experienced any itching, pins & needles sensation, burning or numbness, or a feeling of bugs crawling on or under your skin?"

- 0 – none
- 1 - very mild itching, pins & needles, burning, or numbness
- 2 - mild itching, pins & needles, burning, or numbness
- 3 - moderate itching, pins & needles, burning, or numbness
- 4 - moderate hallucinations
- 5 - severe hallucinations
- 6 - extremely severe hallucinations
- 7 - continuous hallucinations

Auditory Disturbances - Ask, "Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?"

- 0 - not present
- 1 - Very mild harshness or ability to startle
- 2 - mild harshness or ability to startle
- 3 - moderate harshness or ability to startle
- 4 - moderate hallucinations
- 5 - severe hallucinations
- 6 - extremely severe hallucinations
- 7 - continuous hallucinations

Visual disturbances - Ask, "Does the light appear to be too bright? Is its colour different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn't there?"

- 0 - not present
- 1 - very mild sensitivity
- 2 - mild sensitivity
- 3 - moderate sensitivity
- 4 - moderate hallucinations
- 5 - severe hallucinations
- 6 - extremely severe hallucinations
- 7 - continuous hallucinations

Headache - Ask, "Does your head feel different than usual? Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.

- 0 - not present
- 1 - very mild
- 2 – mild
- 3 – moderate
- 4 - moderately severe
- 5 – severe
- 6 - very severe
- 7 - extremely severe

Procedure:

1. Assess and rate each of the 10 criteria of the CIWA scale. Each criterion is rated on a scale from 0 to 7, except for "Orientation and clouding of sensorium" which is rated on scale 0 to 4. Add up the scores for all ten criteria. This is the total CIWA-Ar score for the patient at that time. Prophylactic medication should be started for any patient with a total CIWA-Ar score of 8 or greater (ie. start on withdrawal medication). If started on scheduled medication, additional PRN medication should be given for a total CIWA-Ar score of 15 or greater.
2. Document vitals and CIWA-Ar assessment on the Withdrawal Assessment Sheet. Document administration of PRN medications on the assessment sheet as well.
The CIWA-Ar scale is the most sensitive tool for assessment of the patient experiencing alcohol withdrawal. Nursing assessment is vitally important. Early intervention for CIWA-Ar score of 8 or greater provides the best means to prevent the progression of withdrawal.

Appendix E

NOTTINGHAMSHIRE PRIMARY CARE ALCOHOL DETOXIFICATION CARE AGREEMENT

The following stipulations have been designed to help you in the next couple of weeks, so that you have the best chance of giving up alcohol.

- The detoxification requires that you be abstinent from alcohol so **you must not consume or possess any alcohol**. During detoxification you will be breathalysed and if this is positive, you will not be able to continue with the detoxification.
- In order to get the maximum benefit from the detoxification, you will need to give it your full priority. If you are working, you will need to take time off for a minimum of one week.
- You will be expected to attend the GP surgery daily for at least five days and to take all medication as prescribed by the doctor. If you miss an appointment, you will not be able to continue with the detoxification.
- Aggressive, violent, abusive racist or sexist language or behaviour will not be tolerated. If you demonstrate any of these the detoxification will be stopped.

Please sign below to confirm that the primary alcohol detoxification programme has been explained to you, that you wish to go ahead with it and that you are happy with the conditions set above.

Name :

Date :

Address: :

Phone no. :

Competent carer:

Phone no. :

Appendix F

INFORMATION FOR PATIENTS WITHDRAWING FROM ALCOHOL

- Try to reduce your drinking gradually and gently before the start of the detoxification (detox), so the withdrawal symptoms will be less severe, and the detoxification process will be shorter.
- Avoid the temptation to have a 'last fling', a heavy drinking binge just before you start the detoxification. This would only make the withdrawal symptoms more intense and longer lasting.
- Remember that you should allow 12 hours between finishing your last drink and starting to take your detoxification medication. This is to reduce the danger of the tranquillisers reacting with any alcohol that is still in your system.
- You will probably become dehydrated during detoxification so stock up with soft drinks such as fruit juice, squash, milk, lemonade, herbal tea, water etc.
- Your appetite may be poor during detoxification, but it is still worth trying to eat a little, as small frequent healthy meals will help minimise craving for alcohol. Stock up some light, easily digestible foods, such as biscuits and jelly as well as healthy foods such as fresh fruit and vegetables, cereals, wholemeal bread, fish, and lean meat.
- Make sure you are able to attend all appointments and that you take all medications according to the instructions you have been given.
- During detoxification you may suffer from mood swings, sleeplessness, forgetfulness, poor coordination and feel anxious and irritability. You must take care performing certain tasks such as cooking, boiling water. Plan to take at least 1 week off work and do not drive during this time. The medication (chlordiazepoxide) you have been prescribed should help to reduce these symptoms. For the first couple of days, the dosage is very high, and then it gradually decreases until you are no longer taking any. The drug acts a substitute for the alcohol you have been taking, and the idea is to gradually wean your body off the drug, so that the withdrawal is controlled and comfortable. You have also been prescribed some Vitamin B1 (Thiamine) which is important to protect your brain and your memory functions from harm during the detoxification.
- Try to relax and avoid stress. This is a time for quiet walks, soothing baths, and easy distractions, like watching television. Many people find they cannot concentrate on things like reading, but this is temporary reaction, and nothing to worry about.
- Most people undergoing detoxification find that they need plenty of support from the people around them – especially when they are craving for a drink. A competent person will need to stay with you full time for the first 5-7 days.
- During the detoxification and in the early stages of recovery you will be quite vulnerable, so avoid situations where alcohol is consumed or openly available, and before the detoxification starts remove all the alcohol from your home. If anyone else in your home also drinks, ask them if they will be prepared to stop drinking during the detoxification programme.
- After the detoxification you will remain vulnerable especially in the first few days and weeks, so make sure your after-detoxification plan is clear and definite. You may also want to consider additional support services such as the Alcoholics Anonymous
- Be aware. Coming off alcohol with the aid of the medication you have been prescribed is normally very safe. If you experience any symptoms such as hallucinations, fitting or confusion your carer should call for immediate medical help from the GP or ambulance. For minor symptoms call your GP or NHS 111 for advice:

NHS 111 telephone: 111 GP telephone:Other contact numbers.....

Appendix G

INFORMATION FOR PHARMACISTS RE ALCOHOL DETOXIFICATION

This patient is undergoing a medically assisted detoxification from alcohol. They are being prescribed a reducing course of chlordiazepoxide over 7-10 days. This is being prescribed on a daily basis. Please record this on your patient medication record and counsel the patient. If you have any safety concerns, for example if you think the patient is drinking as well as taking the chlordiazepoxide please contact the prescriber at the practice.

Practice stamp

Appendix H

INFORMATION FOR FRIENDS OR FAMILY OF PATIENTS DETOXIFYING FROM ALCOHOL

Adjusting

If your relative or friend has been drinking for a long time, it will take them and their body some time to adjust to being sober. During this time, the drinker is likely to be restless, irritable, moody, anxious, and depressed, and they may suffer from insomnia and possibly be quite difficult to live with for the next few days and weeks. Usually they start to feel better within the first month, and after six weeks or so they cannot believe how good they feel.

Medication

The medication (chlordiazepoxide) the drinker has been prescribed should help to reduce these withdrawal symptoms. For the first couple of days, the dosage is very high, and then it gradually decreases and stops. This is because the drug is a substitute for the alcohol they have been taking, and the idea is to gradually wean them off the drug so that the withdrawal is gradual, controlled, and comfortable.

They have also been prescribed some Vitamin B1 (Thiamine) which is important to protect their brain and memory functions from harm during the detoxification. Please ensure they take both medications according to the instructions given.

Be careful during this period of time. The medication can make them feel very drowsy and detached from reality. It will slow their reaction times and may affect their judgement. They should not drive a car or operate dangerous machinery until after the treatment is finished. They should take time off work to recover and will need support caring for any children.

Your support to the drinker is very valuable and one of the most successful elements required for success. In terms of psychological support, it helps if you can offer confidence and trust (even if you have been let down before) and can let the drinker know that you believe that they really can succeed this time. Boosting their self-esteem and self-confidence can help them feel that they deserve to feel better and to beat their problem. You may feel that you need support for yourself and need someone to talk to. **Jigsaw** offers specialist family support for children and adults impacted by substances. Tel: 0115 9484 314 or email jigsaw@cgl.org.uk for a free and confidential service for people affected by someone else's substance use.

Diet

Practically, it can help if you can arrange for them to have a high quality diet. Of course they must not drink any alcohol, and it is a good idea to remove all alcohol from the house. At first, they may not have much appetite for solid food, but eating little but often is important and their appetite should gradually return. Fresh fruit and vegetables, juices and water, whole grain cereals, wholemeal bread, fish and lean meat are recommended. High quality diets like this have been shown to help people get better quicker and to reduce their craving for alcohol. The person can drink tea and coffee, but moderation is advised, as too much caffeine can increase sleeplessness and irritability.

Safety

Although the detoxification process is usually very safe, it is important that you know what to do if a problem arises. Minor symptoms causing a little discomfort are to be expected and tolerated. However, any of the following is a cause for concern and should be taken seriously:

- Confusion
- Hallucinations (hearing or seeing things that are not there)
- Fitting

If you identify any of these symptoms, it is important to contact the drinker's GP or NHS Direct immediately for advice. **If the drinker starts fitting call 999 and ask for ambulance service.**

It is **very important** that the drinker takes all the medication prescribed as instructed. It will help to protect the brain and mental functions and preserve memory.

After the detoxification

- Encourage the drinker to make and keep a review appointment with their GP and key worker
- Aim to remove temptation, remove alcohol, and discourage "drinking buddies" from visiting.
- Aim to help the drinker engage with advice and counselling services, AA etc. Offer to accompany them at first, to give them confidence.
- Look after yourself and seek help if you need support. Services are available for friends and family members too (**Jigsaw** Tel: 0115 9484 314 or email jigsaw@cgl.org.uk).

NHS 111 telephone: 111

Appendix I

Acamprosate

Traffic light classification- Amber 2 Information sheet for Primary Care Prescribers

Licensed Indications¹

Acamprosate is indicated as therapy to maintain abstinence in alcohol-dependent patients. It should be combined with counselling.

Therapeutic Summary

Acamprosate (Campral EC®) is a drug that has been shown to double abstinence rates in people receiving treatment for alcohol dependence (i.e. from 10% to 20% or at best up to 40%). Although its mechanism of action is not clearly defined, acamprosate appears to block the excitatory activity in the brain (NMDA Glutamate) and enhance the inhibitory system (GABA). Whilst it has been known as an “anti-craving” drug, the evidence from trials is less conclusive about this as a major effect; whatever its mechanism it does help prolong abstinence for some people.

In addition, acamprosate use in animal models appears to have a neuro-protective effect in that the number of brain cells that die during alcohol detoxification may be reduced (Koob et al, 2002).

Acamprosate is considered when somebody is struggling to maintain abstinence and describes anxiety as a feature of their difficulties in remaining sober. However it is important to also treat any underlying anxiety disorder. If somebody describes “craving” as a desire to get a “high or buzz” from alcohol, acamprosate is less likely to be considered.

The main drawback is that more patients will not derive benefit from acamprosate than those that do. Currently there are no clear guidelines as to which patients may be more likely to benefit than others, although women and those that are more anxious may respond better. Acamprosate is less likely to be effective in those with cognitive damage.

Acamprosate does not constitute treatment for the symptoms of alcohol withdrawal.

Acamprosate does not prevent the harmful effects of continuous alcohol abuse.

Acamprosate should not impair the patient's ability to drive or operate machinery.

Medicines Initiation, Duration of Treatment

In primary care, GPs/NMPs who have received appropriate training may initiate as per Nottinghamshire Primary Care Alcohol Community Detox Protocol (see below).

Should be initiated as soon as possible after abstinence has been achieved and continued for at least 3 months and up to 1 year if the patient finds it helpful; treatment should be maintained if there is a temporary relapse but stopped if the patient returns to regular or excessive drinking that persists for a month after starting treatment.

Dosages and Route of Administration¹

If ≥ 60kg: Two tablets (333mg each) three times a day

If < 60kg: Two tablets should be taken in the morning, and one tablet midday and night.

Not recommended for children <16yr. Limited evidence of use in the elderly

Acamprosate taken with food has lower bioavailability than in the fasting state. Some patients, however, are more comfortable taking the tablets with food.

Steady state levels of acamprosate are achieved by the seventh day of dosing.

Products available

Acamprosate calcium 333mg, 168 tablets £26.07 (Drug Tariff July 2022)

Monitoring Requirements and Responsibilities

No specific monitoring required, no blood tests.

Side effects¹

Side effects are generally minimal and transient in nature. Initially diarrhoea may occur, less frequently nausea, vomiting or abdominal pain. Pruritus may occur and occasionally a maculo-papular rash. Rarely a bullous skin reaction. There may be fluctuations in libido.

Contraindications¹

lactation, and renal insufficiency (serum creatinine >120micromol/L).

Precautions¹

- Safety not established in those under 18 or older than 65 years.
- Severe liver insufficiency
- Acamprosate has little or no abuse potential

Medicine Interactions¹

No significant interactions have been associated with the use of acamprosate. Concomitant intake of alcohol does not affect the pharmacokinetics of either agent. Both factors make it a good choice in those with alcoholic liver disease wishing to remain abstinent. Acamprosate does not interact with benzodiazepines, so assisted withdrawal can be instigated if needed.

Pregnancy and breastfeeding¹

There is no adequate data from the use of acamprosate in pregnant women. Acamprosate must only be used in pregnancy after a careful risk/benefit assessment. Acamprosate is contraindicated in breastfeeding. It is not known whether acamprosate is excreted in human breast milk.

Patient information:

Patient information leaflets for acamprosate, chlordiazepoxide, disulfiram, naltrexone and other medicines used in alcohol dependence can be found at: <https://patient.info/>

References

- 1) Campral EC – Merck. Summary of Product Characteristics (last updated 17/12/2020). <http://www.medicines.org.uk>. [Accessed 26/05/2022].
- 2) Department of Health and Social Care (2017), *Drug misuse and dependence: UK guidelines on clinical management*, <https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management>

Appendix J

Chlordiazepoxide

Traffic light classification- Amber 2
Information sheet for Primary Care Prescribers

Licensed Indications¹

Symptomatic relief of acute alcohol withdrawal.

Therapeutic Summary

Chlordiazepoxide is the first drug of choice within the trust for the treatment of alcohol withdrawal. This reflects recommendations from the Royal College of Physicians (2001) and the SIGN Guideline No 74 (2003).

The first line treatment for the management of assisted withdrawals from alcohol is chlordiazepoxide. The use of chlordiazepoxide and diazepam has the strongest evidence base in the management of detoxification. Although clomethiazole (former name chlormethiazole) is an effective treatment for alcohol withdrawal, there are well documented fatal interactions with alcohol which render it unsafe to use without close supervision.

Medicines Initiation

In primary care, GPs/NMPs who have received appropriate training may initiate in line with the Nottinghamshire Primary Care Alcohol Community Detox Protocol.

Dosages and Route of Administration

Example dosage regimen for oral chlordiazepoxide:

	Daily units of alcohol intake or SADQ score			
	30 units or SADQ 30	25 units or SADQ 25	20 units or SADQ 20	15 units or SADQ 15
Day 1	30 mg QDS	25 mg QDS	20 mg QDS	15 mg QDS
Day 2	25 mg QDS	20 mg QDS	15 mg QDS	10 mg QDS
Day 3	20 mg QDS	15 mg QDS	10 mg QDS	10 mg TDS
Day 4	15 mg QDS	10 mg QDS	10 mg TDS	5 mg TDS
Day 5	10 mg QDS	10 mg TDS	5 mg TDS	5 mg BD
Day 6	10 mg TDS	5 mg TDS	5 mg BD	5 mg OD
Day 7	5 mg TDS	5 mg BD	5 mg OD	
Day 8	5 mg BD	5 mg OD		
Day 9	5 mg OD			

As required (PRN) prescribing

In view of the need to titrate the dose of chlordiazepoxide in relation to the severity of withdrawal symptoms there should also be a prescription for as required medication.

If Clinical Institute Withdrawal Assessment for *Alcohol* (CIWA-Ar) score is >10 advise one PRN dose chlordiazepoxide 10mg and review in 6 hours. If CIWA remains >10 give further 10mg PRN dose with further 2 doses of PRN left with carer with instructions on dispensing if shows further signs of withdrawals.

If > 3 doses PRN required discuss with prescribing doctor regarding suitability for community detoxification and whether requires transfer to hospital or increase in regular dose of chlordiazepoxide (e.g. 30mg qds).

If the GP is concerned that the patient is developing serious complications of withdrawals (delirium, confusion, seizures) then clear pathways should be established for urgent medical review and transfer to A&E.

Over-medication

If the patient appears over-sedated on a particular regime, or if the sedation scale reads 13 or below, then the next dose of chlordiazepoxide should be omitted.

If the CIWA-Ar remains below 9 for both readings on a single day, then the planned regular dosage for the following day should be replaced by that of the day after. This will have the effect of shortening the duration of detoxification by one day. For example, if the CIWA-Ar is 8 on both of Tuesday's readings, then the schedule planned for Thursday should be administered on Wednesday, the schedule planned for Friday should be administered on Thursday etc.

Products available

Chlordiazepoxide hydrochloride available generically, 100x5mg capsules - £16.58 (DT, July 2022)

Duration of Treatment

See information on dosages; treatment duration should be planned from initiation, and as short as possible. Treatment should never exceed 4 weeks, including the tapering-off process.

Monitoring Requirements and Responsibilities

Confusion and disorientation can occur during detoxification because of several different complications of alcohol dependency. The differential diagnosis includes:

- Severe alcohol intoxication
- Delirium tremens (severe alcohol withdrawal)
- Alcohol withdrawal seizure
- Wernicke's Encephalopathy
- Hepatic encephalopathy
- Head injury
- Hypoglycaemia

All these conditions are potentially life-threatening and the occurrence of acute confusion in the detoxifying alcoholic should be treated as a medical emergency. The GP should arrange for immediate transfer of the patient to the Emergency Department.

- Dependence. Regular monitoring of patients at risk of dependence is essential. Routine repeat prescriptions should be avoided and treatment should be withdrawn gradually.

Side effects¹

For a comprehensive list of side effects, refer to [SPC](#) (where the information below was obtained).

Common adverse effects include drowsiness, sedation, unsteadiness, and ataxia; these are dose-related and may persist into the following day even after a single dose. The elderly are particularly sensitive to the effects of centrally depressant drugs and may experience confusion, especially if organic brain changes are present; the dosage of chlordiazepoxide should not exceed one-half that recommended for other adults.

Other adverse effects are rare and include headache, vertigo, hypotension, gastro-intestinal upsets, skin rashes, visual disturbances, changes in libido, and urinary retention. Isolated cases of blood dyscrasias and jaundice have also been reported.

Wernicke's Encephalopathy

A presumptive diagnosis of Wernicke's encephalopathy should be made if any of the following supervene during detoxification: ataxia, confusion, memory disturbance, hypothermia, and hypotension, ophthalmoplegia or nystagmus, coma/unconsciousness.

Hepatic Encephalopathy

Hepatic encephalopathy occurs in the context of hepatic failure. As such, if this is the cause of the confusional state there will usually be evidence of liver failure on examination. Findings in liver failure may include liver palms, spider naevi, gynaecomastia, jaundice, ascites, oedema, cyanosis, clubbing, hepatic foetor. Blood tests may demonstrate grossly elevated liver enzymes, reduced albumin, and clotting abnormalities.

The acute onset of hepatic encephalopathy is otherwise hard to differentiate from the other causes of acute confusion, although the presence of a coarse flapping tremor which occurs when the arms are outstretched and the wrists extended is indicative, although not pathognomonic.

Delirium Tremens

Delirium Tremens is merely an especially severe alcohol withdrawal syndrome. However, it is also potentially fatal, and should be managed as such. The classical triad of symptoms include confusion, vivid hallucinations and illusions affecting any sensory modality and marked tremor. Prodromal symptoms include insomnia, tremulousness, and fear. Onset may also be preceded by withdrawal convulsions.

Contraindications¹

- known sensitivity to benzodiazepines
- acute pulmonary insufficiency, respiratory depression, sleep apnoea syndrome
- phobic or obsessional states
- chronic psychosis
- Severe hepatic insufficiency
- Pregnancy/planning a pregnancy
- Myasthenia gravis
- Spinal/cerebral ataxia

Precautions¹

- Treatment duration should be as short as possible, with routine monitoring for risk of dependence
- On withdrawal patient may suffer rebound insomnia/anxiety
- Elderly patients should be given a reduced dose
- This medicine can impair cognitive function and can affect a patient's ability to drive safely. This class of medicine is in the list of drugs included in regulations under 5a of the Road Traffic Act 1988.

Clinically Relevant Medicine Interactions and Their Management¹

- If chlordiazepoxide is combined with centrally acting drugs such as neuroleptics, tranquilisers, antidepressants, hypnotics, analgesics and anaesthetics, the sedative effects are likely to be intensified. The elderly require special supervision.
- When chlordiazepoxide is used in conjunction with anti-epileptic drugs, side-effects and toxicity may be more evident, particularly with phenytoin or barbiturates or combinations including these. This requires extra care in adjusting dosage in the initial stages of treatment.
- Known inhibitors of hepatic enzymes (e.g. cimetidine, omeprazole, macrolide antibiotics) have been shown to reduce the clearance of benzodiazepines and may potentiate their action.
- Known inducers of hepatic enzymes (e.g. rifampicin) may increase the clearance of benzodiazepines.

It is not appropriate to give maintenance of this (or any other) benzodiazepine to those with an alcohol dependency. Any exception to this should be well documented with reasons why.

For a comprehensive list of interactions, refer to the SPC and BNF.

Pregnancy and Breastfeeding¹

Chlordiazepoxide crosses the placenta. It should not be used during pregnancy, especially during the first and last trimester, unless the benefit outweighs the risks.

Chlordiazepoxide may appear in breast milk. Use should be avoided in breastfeeding if possible.

Following changes to the SPC regarding a possible genotoxicity risk and contraception requirements for males and females, the MHRA is reviewing the available evidence. Healthcare professionals should continue to use current clinical guidelines whilst this issue is being evaluated. UKTIS have released a [position statement](#).

Patient information:

Patient information leaflets for acamprosate, chlordiazepoxide, disulfiram, naltrexone and other medicines used in alcohol dependence can be found at: <https://patient.info/>

References

- 1) Librium 5mg and 10mg capsules – Mylan. Summary of Product Characteristics (last updated 17/05/22). <http://www.medicines.org.uk> [Accessed on 26th May 2022].
- 2) Department of Health and Social Care (2017), *Drug misuse and dependence: UK guidelines on clinical management*, <https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management>

Appendix K

Disulfiram

Traffic light classification- Amber 2
Information sheet for Primary Care Prescribers**Licensed Indications¹**

Adjunct in the treatment of alcohol dependence (under expert supervision). Use must be accompanied by appropriate supportive management.

Therapeutic Summary¹

Disulfiram (Antabuse[®]) is normally described as a deterrent or alcohol sensitising drug. It is used in the treatment of alcohol dependence and is licensed for use in helping avoid relapse once abstinence has been achieved.

It acts by blocking the activity of the liver enzyme aldehyde dehydrogenase (ALDH). This produces a build-up of acetaldehyde (a toxic substance) when alcohol is consumed. The concentration of acetaldehyde in the blood may be 5 to 10 times higher than that found during the normal metabolism of alcohol. If alcohol is consumed by an individual taking disulfiram within 10-15 minutes, they will experience an unpleasant reaction (DAR) mediated by the build-up of acetaldehyde. Disulfiram Alcohol Reaction (DAR) symptoms may be severe and life-threatening, they include:

- Severe headache
- Violent flushing
- Palpitations and tachycardia
- Nausea and vomiting
- Hypotension
- Collapse
- Cardiac arrhythmias

The severity of the reaction varies between individuals some having severe and occasionally life-threatening reactions, others having mild or no reaction at standard doses (these latter individuals may require higher doses).

Disulfiram works by changing the expectancy of the effects of alcohol from positive and rewarding to negative and aversive.

Medicines Initiation

In primary care, GPs/NMPs who have received appropriate training may initiate as per Nottinghamshire Primary Care Alcohol Community Detoxification Protocol. In secondary care on specialist advice of Alcohol and Drug Liaison Team.

Disulfiram is not a stand-alone treatment for alcohol dependence it is essential that the patient be actively engaged in psychosocial interventions aimed at relapse prevention.

Dosages and Route of Administration

Patients should be assessed for their suitability for disulfiram. This should include:

- Motivation to remain abstinent from alcohol
- No absolute contraindications for the treatment (see later section - contraindications)

The usual treatment dose is 200mg once daily.

On occasions with certain sensitive patients 100mg (half a tablet) once daily can be given. In individuals who had an inadequate alcohol disulfiram response previously the dose can be increased to 400mg once daily or even 600mg once daily. To enhance compliance the medication can be dispersed in water.

The BNF no longer describes a loading dose for initiating disulfiram. In the experience of many specialists in the substance misuse field, it is unnecessary. Consequently, the local specialist service believes that there is no requirement for a loading dose to start treatment.

Patients are usually initiated on this by the NRN specialist service or Edwin House following a detoxification and because it is such a fragile period, they are usually seen daily for 2 weeks for breath tests to check abstinence and supervised taking of the medication. They should then generally be seen every 2-4 weeks for the next five months depending on stability and thereafter every three months. If stable, no specialist input is essential after the first 2 weeks daily supervision.

Abstinence is required for 24 hours prior to commencing treatment and a negative breath alcohol should be confirmed prior to initiation of initial dose of 200mg. This dose should be continued thereafter, any patients assessed as requiring higher doses should be referred to the specialist alcohol service. **It is often advised that disulfiram be taken for at least 3-6 months as a minimum, but longer periods should be considered if requested by a patient; if previous episodes of sobriety or controlled drinking led to a relapse or if previous dependence was severe.** Continued prescribing does not produce tolerance and usually results in an increased sensitivity to alcohol (and the risk of DAR).

Research suggests that when disulfiram is administered by a near relative or carer the degree of compliance is enhanced, and the risk of relapse significantly reduced. It is best prescribed as part of a psychosocial treatment package.

Products available

Disulfiram 200mg tablets. 50 tablets - £176.25 (DT, July 2022)

Duration of Treatment

Treatment is usually for 6-12 months in some cases individuals are treated for longer periods.

Monitoring Requirements and Responsibilities

No regular monitoring is essential. However, it is recommended that prior to the commencement of disulfiram the following investigations are completed:

- Full physical examination
- Blood pressure and pulse
- Liver function tests (LFTs)

Whilst any results outside of normal range may need to have bloods repeated after a period of abstinence from alcohol to identify any changes in hepatic functioning, it is generally safe to start disulfiram if appropriate whatever the LFTs; this is because for most individuals with a dependent alcohol history, the greatest risk to their liver is continued drinking and any effects of disulfiram are likely to be less risky. **More important is to check that the patient is actually taking the disulfiram and hasn't relapsed back to drinking (breath alcohol tests at GP or NRN appointments are useful to confirm abstinence).**

If a lapse/relapse occurs (alcohol use is reported) the prescription should be discontinued to minimise the risk of a DAR. The patient should be encouraged to analyse the relapse process to minimise the risk of future episodes of alcohol consumption. It may be appropriate to reinstate the prescription when abstinence can be demonstrated.

Side effects¹

- Drowsiness and fatigue (take at night usually lessens)
- Nausea /vomiting (take after food)
- Halitosis (dental hygiene)
- Sexual dysfunction/lack of libido (discuss with GP may be another cause)
- Mood changes (discuss with GP)
- Impaired liver function (monitor LFTs - may need to discontinue)
- Peripheral neuropathy (discuss with GP)
- Hallucinations (discuss, discontinue)
- Dermatitis (discuss, discontinue)

Contraindications¹

- Cardiac failure, CHD
- Coronary artery disease
- History of stroke
- Myocardial infarction, Angina
- Hypertension (uncontrolled)
- Psychosis
- High suicide risk, severe personality disorder
- Renal failure
- Pregnancy

Precautions¹

- Alcohol challenge is **not** recommended on routine basis.
- **Alcohol must not be consumed during treatment and for up to 14 days after discontinuation.**
- Caution in renal failure, reduced hepatic function, hypothyroidism, cerebral damage, acute porphyria, diabetes mellitus, epilepsy, and in respiratory disease

Clinically relevant medicine interactions and their management¹

- Phenytoin (both can increase the risk of neuropathy). Disulfiram increases the concentration of phenytoin. Monitor phenytoin concentration and adjust dose accordingly.
- Warfarin – Disulfiram increases the anticoagulant effect of warfarin. Monitor INR and adjust dose as necessary.
- Disulfiram inhibits the metabolism of chlordiazepoxide and diazepam; thereby enhancing their sedative effect.
- Amitriptyline may increase the intensity of disulfiram-alcohol reaction.

- Metronidazole – Disulfiram increases the risk of acute psychoses when given with metronidazole.

For a comprehensive list of interactions, refer to the SPC and BNF.

Pregnancy and breastfeeding¹

Avoid in the first trimester of pregnancy. The use of disulfiram in pregnant patients is based on an individualised assessment of the risks and benefits. Avoid in breastfeeding.

Patient information

- Warn that the disulfiram-alcohol reaction is potentially dangerous
- Certain foods, liquid medicines, remedies, tonics, toiletries, perfumes, and aerosol sprays may contain sufficient alcohol to elicit a disulfiram-alcohol reaction
- Advise caution with low alcohol and “non-alcohol” or “alcohol-free” beers and wines, which may provoke a disulfiram-alcohol reaction when consumed in sufficient quantities.

Patient information leaflets for acamprosate, chlordiazepoxide, disulfiram, naltrexone and other medicines used in alcohol dependence can be found at: <https://patient.info/>

References

- 1) Disulfiram 200mg tablets – Brown & Burk UK Ltd. Summary of Product Characteristics (last updated 03/07/2021). <http://www.medicines.org.uk>. [Accessed 26/05/2022].
- 2) Department of Health and Social Care (2017), *Drug misuse and dependence: UK guidelines on clinical management*, <https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management>

Appendix L

Vitamin B

Information sheet for Primary Care Prescribers

Key messages for Primary Care:

- **Parental thiamine hydrochloride 50mg/ml solution for injection (5ml ampoule) [New Nov2024]**
Pabrinex® IM discontinued April 2025. See [SPS](#) (log in required) for further information.
 - Parenteral (IV or IM) thiamine achieves higher levels of thiamine in the body than oral administration because the absorption of thiamine from the gut is poor in malnourished people and reduced further by the presence of alcohol.
 - Consider parenteral thiamine in the following groups of patients:
 - i) High-risk heavy drinking with malnourishment
 - ii) Confirmed or strongly suspected diagnosis of Wernicke's
 - Licensed Thiamine hydrochloride 50mg/ml solution for injection (5ml ampoule) is available and can be used for both IM and IV administration.
 - IM injection is preferred due to lower risk of anaphylaxis but note that facilities for treating anaphylaxis (including resuscitation facilities) should be available when IM or IV thiamine is administered.
 - IM injection is classified Amber 3 (primary care may initiate as per guideline) and may be administered in primary care by **appropriately trained professionals using the correct administration technique**.
 - A 15-minute observation period is recommended post IM thiamine hydrochloride injection.
 - IV thiamine is RED on the joint formulary (specialist prescribing and administration only).
 - More detail below including dosing and administration – [click here](#).
- **Thiamine is needed** to prevent Wernicke's encephalopathy:
 - Prescribe for all people with harmful or dependent drinking. High risk groups with poor diets may require parenteral thiamine followed by oral (see above).
 - Recommended oral prophylactic dose for harmful or dependent drinking is 200mg to 300mg daily in divided doses.
 - Thiamine should be continued for as long as malnutrition is present and/or during periods of continued alcohol consumption.
 - Recommended dose post detoxification is 200mg to 300mg daily in divided doses for 6 weeks then review. If still abstinent at 6 weeks, and there are no signs of cognitive impairment, then stop. If there are signs of cognitive impairment then continue thiamine for a further 6 weeks, then review and stop if still abstinent. Restart if patient starts drinking again.
 - Continuing need for thiamine should be reviewed at appropriate intervals which may depend on individual patient circumstances
 - More detail below – [click here](#).

- **Vitamin B compound STRONG** tablets should only be used to correct vitamin B deficiency caused by poor nutrition and not for maintenance or preventative treatment:
 - Vitamin B compound preparations should not be prescribed for prevention of Wernicke’s Encephalopathy (WE) in alcoholism.
 - The BNF regards these products as less suitable for prescribing - they should not be considered as drugs of first choice but may be justifiable in certain circumstances.
 - The exceptions in the [NHS England guidance](#) that allow vitamins to be prescribed (rather than purchased over the counter) include medically diagnosed deficiency, including for those patients who may have a lifelong or chronic condition or have undergone surgery that results in malabsorption; and malnutrition including alcoholism. Maintenance or preventative treatment is not considered an exception.
 - If the prescribing of vitamin B complex is considered justifiable based on the circumstances described above, prescribe as vitamin B compound STRONG, not “vitamin B compound” which are more than ten times the price.
 - More detail below – [click here](#).

Background

Severe vitamin deficiencies may lead to a variety of conditions of which Wernicke’s encephalopathy is most critical. People who misuse alcohol, particularly regular heavy drinkers, often have a poor diet. It is usual to consider vitamin supplements at detoxification ([NICE CG 100](#)). The logic for this is that detoxification may precipitate Wernicke’s encephalopathy and detoxification will often follow a period of particularly heavy drinking, but detoxification also represents an opportunity to assess and treat.

Therapeutic Summary

Wernicke’s is caused by thiamine deficiency, which is commonly seen in heavy drinkers because they have a poor intake of vitamins, poor absorption due to gastritis and high demand because the metabolism of alcohol depends upon thiamine as a co-enzyme.

It is estimated that 80% of cases are sub-clinical and only 10% of cases present with the classic triad of confusion, ataxia and ophthalmoplegia (paralysis of eye muscles). Wernicke’s encephalopathy has been shown to occur in 12.5% of alcohol misusers. It may develop rapidly or over a number of days. Inappropriately managed it is the primary or a contributory cause of death in 17% of patients and results in permanent brain damage in 85% of survivors. It is initially reversible with parenteral B vitamins so treatment should be initiated immediately a diagnosis is suspected or when there are identified risk factors during alcohol detoxification.

Medicines – BEFORE DETOXIFICATION

Oral Thiamine

Whilst still drinking heavily, it is very important that any people with harmful or dependent drinking are given adequate doses of **thiamine** as a harm reduction measure. Depending on the degree of dependency and nutritional status, doses of 200mg to 300mg daily in divided doses thiamine are recommended; however high risk groups with poor diets may require parenteral thiamine followed by oral.

Parenteral thiamine hydrochloride 50mg/ml solution for injection (5ml ampoule)

N.B. **IV** thiamine is currently classified **RED** in the Nottinghamshire Traffic Light list
IM thiamine is **AMBER 3**

There is active transport of thiamine across the blood-brain barrier, but it relies on an enzyme dependent itself on thiamine for production; hence oral thiamine is likely to be of little help in these thiamine-depleted patients.

Passive transport for thiamine across the blood brain barrier relies on a steep concentration gradient from blood to CSF. A high blood concentration can only be achieved by parenteral administration, as the absorption of thiamine from the gut is poor in the malnourished and reduced further by the presence of alcohol.

NICE guidance [CG 100/CG 115](#) suggest **parenteral followed by oral** for these high risk groups:

- decompensated liver disease
- medically assisted withdrawal from alcohol (planned or unplanned)
- acute alcohol withdrawal
- malnourishment or risk of malnourishment; this may include:
 - weight loss in past year
 - reduced BMI
 - loss of appetite
 - nausea and vomiting
 - a general impression of malnourishment
- homelessness
- hospitalised for acute illness/ comorbidity or another alcohol issue

Treatment of Acute Wernicke's Syndrome

Wernicke's encephalopathy must be treated urgently with parenteral thiamine. It is extremely safe with an incidence of anaphylaxis of approximately 1 in 1 million doses given (but anaphylaxis risk is higher with IV administration, **so we advise that in the community it is only given by IM route - see below**).

Signs of possible Wernicke's syndrome in a patient undergoing detoxification
Confusion Ataxia Ophthalmoplegia (paralysis of eye muscle) Nystagmus Memory disturbance Hypothermia and hypotension Coma

When to use parenteral thiamine

The British Association for Psychopharmacology Guidelines (Lingford-Hughes et al., 2012) recommend a graded response depending on risk:

- People with Low-risk drinking without neuropsychiatric complications who appear healthy and are believed to take a reasonable diet – minimum treatment of oral thiamine 300mg daily during detoxification or periods of particularly high alcohol intake.
- People with high-risk heavy drinking who are malnourished – thiamine 250mg daily (one ampoule) IM once daily for 5 days.
- Confirmed or strongly suspected diagnosis of Wernicke's – parenteral thiamine (IM or IV) of >500mg should be given for at least 2 days (e.g. two ampoules - three times a day for 2 days, followed by one ampoule once daily for 5 days) depending on response.

MHRA / CHM Advice (September 2007)

Although potentially serious allergic adverse reactions may rarely occur during, or shortly after, parenteral administration, the CHM have recommended that:

- This should not preclude the use of parenteral thiamine in patients where this route of administration is required, particularly those at risk of Wernicke-Korsakoff Syndrome where treatment with thiamine is essential.
- Intravenous administration should be by infusion over 30 minutes.
- Facilities for treating anaphylaxis (including resuscitation facilities) should be available when parenteral thiamine is administered.

Repeated injections of preparations containing high concentrations of vitamin B1 (thiamine) may give rise to anaphylactic shock. Mild allergic reactions such as sneezing or mild asthma are warning signs that further injections may give rise to anaphylactic shock. Facilities for treating anaphylactic reactions should be available whenever parenteral thiamine is administered.

Route of Administration:

The IM route is preferred due to a lower risk of anaphylaxis. **This can be given by appropriately trained professionals with access to resuscitation facilities.**

Intravenous (IV) administration should be reserved for cases where intramuscular injection is contra-indicated (e.g. bleeding disorders or the INR is not normal) or not tolerated and IV **should** only be used in appropriate specialist setting.

Intramuscular Route:

The contents of the ampoule(s) should be injected slowly high into the gluteal muscle, 5cm below the iliac crest. A 15-minute observation period is recommended post IM injection.

Medications – after detoxification**Thiamine**

Continue thiamine at dose of 200mg to 300mg daily in divided doses for 6 weeks post detox then review. If still abstinent at 6 weeks and there are no signs of cognitive impairment, then stop. If there are signs of cognitive impairment then continue thiamine for a further 6 weeks, then review and stop if still abstinent. Restart if patient starts drinking again. [UPDATED Jul 2020]

It is important to consider compliance.

Thiamine should be continued for as long as malnutrition is present and/or during periods of continued alcohol consumption. Continuing need for thiamine should be reviewed at appropriate intervals which may depend on individual patient circumstances [NEW Jul2020]

Vitamin B Co STRONG should be prescribed to a problem drinker **in addition to thiamine** if:

- There are signs and symptoms suggestive of B vitamin deficiencies, as outlined above
- There is evidence of significant poor nutrition, such as low body mass index (less than 18.5) or significant weight loss over the last 6 months (greater than 5%)
- The patient has diseases likely to combine with chronic drinking to cause vitamin deficiencies, such as malabsorption syndromes (for example Crohn's and Coeliac disease), severe chronic organ disease, such as severe chronic liver disease, COPD and chronic kidney disease and severe chronic infection (for example tuberculosis)
- In preparation for assisted withdrawal, where body demand for B vitamins is likely to increase
- Prescribe generic Vitamin B Co strong tabs, two tablets three a day. Stop post detoxification, once patient has been abstinent for 6 weeks. Consider restarting if patient starts drinking again. [UPDATED Jul2020]
- Prescribe as vitamin B compound STRONG, not "vitamin B compound" tablets which are more than ten times the price.

References:

- 1) Department of Health and Social Care (2017), *Drug misuse and dependence: UK guidelines on clinical management*, <https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management>
- 2) Leach. JM (2017), *Should GPs prescribe vitamin B compound strong tablets to alcoholics?* British Journal of General Practice 2017; 67 (656): 134-135.
- 3) NICE CG 100: Alcohol-use disorders: diagnosis and management of physical complications (last updated Apr 2017)
- 4) NICE CG 115: Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence (Feb 2011)
- 5) NICE Clinical Knowledge Summary: Alcohol-problem drinking.
Available from: <https://cks.nice.org.uk/alcohol-problem-drinking>
- 6) Summary of Product Characteristics; Thiamine Hydrochloride 50 mg/ml solution for injection. [Thiamine Hydrochloride 50 mg/ml solution for injection - Summary of Product Characteristics \(SmPC\) - \(emc\)](#)

Appendix M

Naltrexone

Traffic light classification - Amber 2 Information sheet for Primary Care Prescribers

Licensed Indications

Oral naltrexone is recommended as a treatment option in patients who have completed opioid detoxification and are highly motivated to remain abstinent from using opioids^{1,2} ([NICE TA115](#) and [DOH Orange Guidance](#)). It should only be prescribed as part of a programme of supportive care^{1,2}.

Oral naltrexone is also recommended as a treatment option for people who have detoxified from using alcohol. Please see the Nottinghamshire Primary Care Alcohol Dependence Guideline for more information on this indication ([link](#)).

Therapeutic Summary

Naltrexone hydrochloride is a non-elective opioid antagonist capable of blocking the effects of heroin and opioids (including morphine-like medicines). It does not block the effects of other illicit substances (e.g., cocaine, amphetamines).

Medicines Initiation

Naltrexone should only be administered under adequate supervision to people who have been fully counselled on the potential adverse effects of treatment. These include:

- The importance of being opioid free prior to starting treatment, and the risk of acute withdrawal, if the patient is not opioid free.
- The risk of overdose from attempting to overcome the antagonist effect of naltrexone during treatment.
- The importance of not using opioid medicines during treatment (this includes over-the-counter cough, cold and anti-diarrhoeal medicines).
- The loss of tolerance to opioids that occurs after a period of abstinence and the risk of overdose if the person lapses to opioid use.

Naltrexone treatment must begin only when the opioid has been discontinued for a sufficiently long period (about 5 to 10 days). A urine test is necessary to confirm abstinence from opioids before initiation of treatment.

Naltrexone will be initiated by the specialist service. When care is transferred to the GP a letter will be sent with contact details of the specialists that initiated the medicine. The patient will have been given a card indicating to others that they are prescribed naltrexone.

Products available

Naltrexone hydrochloride 50mg, 28 film-coated tablets - £77.84 (Drug Tariff, July 2022)³.

Dosages and Route of Administration^{3,4}

Once it is confirmed a patient is opioid free, 25mg (half a tablet) is given on day one. The patient is observed for 1 hour, and if there is no opioid withdrawal then 50mg is initiated daily. Doses can be taken 50mg daily, or three days a week to improve compliance (100mg Monday and Wednesday, 150mg Friday). The maximum dose is 350mg per week.

Where there is significant other/third party involvement, with the patient's consent, it may be useful to enlist their support in the administration of naltrexone.

Duration of Treatment

Patients prescribed naltrexone should be reviewed regularly (at least monthly) by the specialist service during treatment. Duration of treatment is usually 3 months⁵. Ongoing treatment should be based on clinical judgement and shared decision with the patient. It is unusual for treatment to be continued for more than 12 months.

Naltrexone should be stopped if the patient lapses into opioid use.

Monitoring Requirements and Responsibilities

The specialist will arrange for the necessary blood tests, inform primary care of the results and any follow up that is required. Baseline monitoring should be carried out as close to initiating naltrexone as possible. The specialist will apply clinical judgement, on an individual patient basis, to decide whether previous blood tests can be used as a baseline measure.

General Monitoring Requirements		
<i>Naltrexone should NOT be initiated without checking baseline liver and renal function.</i>		
	Before treatment	During treatment
Renal Function	✓	Check if concerns re: renal function
Liver Function Tests	✓	Repeat 4 weeks after start of treatment, annually and when clinically indicated

Side effects^{4,5}

For a comprehensive list of side effects, refer to the [SPC](#).

Gradual introduction with abstinence prior to initiation will help prevent side effects, and support with nausea management will be beneficial (there are no known interactions with standard anti-emetics). Side effects should have settled by the time treatment has been transferred to primary care.

SIDE EFFECTS		ACTION	
Very common ($\geq 1/10$)			
Nervousness, Anxiety, Insomnia		These are usually transient and self-limiting, should not require cessation of the drug.	
Abdominal Pain, Cramps, Nausea, Vomiting			
Arthralgia, myalgia			
Headaches, restlessness			
Common ($\geq 1/100$; $< 1/10$)			
Decreased Appetite		These are usually transient and self-limiting, should not require cessation of the drug.	
Irritability, Mood swings			
Chest Pain, Tachycardia, heart palpitation			
Dizziness			
Diarrhoea, Constipation			
Rash			
Thirst, increased energy, chills, hyperhidrosis			
Delayed Ejaculation, erectile dysfunction, libido disorders			

Contraindications^{4,5}

- Hypersensitivity to naltrexone or any excipients
- Severe renal impairment
- Severe or acute hepatic impairment
- Acute hepatitis or liver failure
- Opioid addicted patients with a current abuse of opioids since an acute withdrawal syndrome may ensue.
- Positive screening result for opioids or after failure of the naloxone provocation test
- Use in conjunction with an opioid – containing medication
- In combination with methadone or buprenorphine
- Breastfeeding
- Rare hereditary galactose intolerance, total lactase deficiency or glucose-galactose malabsorption

Precautions^{4,5}

- Naltrexone should be used only when an opioid has been discontinued for a sufficiently long period (about 5-10 days). The patient should be aware of the risk of overdose from any attempts to overcome the blockade effect of the medication. If the patient has been using opioids prior to the administration of naltrexone then severe and prolonged withdrawal symptoms can follow.
- Patients taking naltrexone will have no benefit from opioids prescribed for acute pain. If a patient on naltrexone is scheduled for elective surgery that is likely to be acutely painful, oral naltrexone may be discontinued 48-72 hours before the procedure².
- During treatment pain conditions should be treated with non-opioid analgesia only.
- Mild to moderate liver impairment.
- Mild to moderate renal impairment.

Clinically Relevant Medicine Interactions and Their Management^{4,5}

- Concomitant administration with any opioid-containing medication should be avoided (including opioid containing cough medication and opioid containing medication for diarrhoea)
- There are no known interactions with alcohol
- Naltrexone may significantly increase acamprosate plasma levels
- Caution is advised with barbiturates, benzodiazepines, anxiolytics, hypnotics, sedative antidepressants, and sedative antihistamines.

Pregnancy and breastfeeding^{4,5}

- There is no clinical data on naltrexone use in pregnancy. Data from animal studies have shown reproductive toxicity. Naltrexone should therefore only be given to pregnant women when, in the judgement of the specialist, the potential benefits outweigh the possible risks.
- There is no clinical data on naltrexone use in breastfeeding. Breastfeeding is not recommended during naltrexone treatment.

Patient information

Patient information leaflets for acamprosate, chlordiazepoxide, disulfiram, naltrexone and other medicines used in alcohol dependence can be found at: <https://patient.info/>

References

- 1) NICE TA115: Naltrexone for the management of opioid dependence (2007), <https://www.nice.org.uk/guidance/ta115/resources/naltrexone-for-the-management-of-opioid-dependence-pdf-82598074558405>
- 2) Department of Health and Social Care (2017), *Drug misuse and dependence: UK guidelines on clinical management*, <https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management>
- 3) The Electronic Drug Tariff <https://www.drugtariff.nhsbsa.nhs.uk/#/00798052-DC/DC00798043/Home> [Accessed on 28/07/2022].
- 4) Joint Formulary Committee. *British National Formulary* (online) London:BMJ Group and Pharmaceutical Press. <https://www.medicinescomplete.com/mc/bnf/current/> [Accessed on 23/05/2022].
- 5) Adepnd 50mg tablets – AOP Orphan Ltd. Summary of Product Characteristics (last updated 16/01/20). <http://www.medicines.org.uk> [Accessed on 23/05/2022].

Appendix N

NOTTINGHAM CITY ALCOHOL PATHWAY/SUPPORT ON A PAGE

Version 7 - 9th May 2022

Do AUDIT C and brief alcohol advice at long term condition reviews especially diabetes /hypertension/ LD or SMI checks & new pt checks.

Ask opportunistically if presents with anxiety, insomnia, depression, minor injuries, raised BP or lipids, gout, epigastric pain, psoriasis, obesity, pregnancy

