

**Protocol for the management of alcohol withdrawal using a fixed chlordiazepoxide regime
in mental health in-patient wards**

Background

It is relatively common for patients admitted to mental health wards to have co-morbid alcohol problems. A proportion of those patients develop alcohol withdrawal shortly after admission. An audit at Leverndale Hospital demonstrated that there is a lack of consistency in the management of withdrawal symptoms. Problems experienced include failure to accurately assess and score alcohol use, confusion over an appropriate starting dose of chlordiazepoxide, failure to carry out daily dose reductions and failure to prescribe vitamin supplementation correctly.

The purpose of the protocol is to provide a consistent but flexible approach to the management of alcohol withdrawal in mental health in patient settings.

Scope

This protocol applies to all mental health in patient setting across NHS Greater Glasgow & Clyde. It does not apply to Alcohol and Drug Recovery Service in-patient units.

Assessment

Key to the successful treatment of alcohol withdrawal is effective assessment of patients. In addition to the standard assessment undertaken for all patients on admission (FAST tool on appendix 2 can aid assessment), if there is a suspicion of alcohol misuse prior to admission a formal assessment of the patient's alcohol use must be undertaken using the Severity of Alcohol Dependence Questionnaire (SAD-Q) (see appendix 1). The completed SAD-Q will be filed in the patient's care record and the score obtained will be entered on to the fixed dose chlordiazepoxide regime.

Chlordiazepoxide fixed regime

NICE guidelines recommend the use of fixed or symptom triggered dosing regimens with either chlordiazepoxide or diazepam to manage alcohol withdrawal. In mental health services chlordiazepoxide is the drug of choice. To ensure consistency of treatment the Mental Health Drug & Therapeutics Committee has decided that a fixed dose regime is the best approach for our services. The form on the following page will be used for this purpose. The starting dose chosen will depend on the SAD-Q obtained and the clinical judgement of the prescribing doctor. In the event of known liver impairment, consideration should be given to using alternative benzodiazepines e.g. oxazepam. Contact pharmacy services for advice in these circumstances.

Vitamin supplementation

Appropriate vitamin supplementation is essential to mitigate the risk of developing Wernicke's encephalopathy (see red box below regarding recognising acute illness) or Korsakoff's syndrome. The fixed dose regime contains a reminder to clinicians to prescribe intramuscular Pabrinex (see yellow box below regarding anaphylaxis) and oral thiamine to all patients undergoing treatment for alcohol withdrawal. Thiamine should be prescribed for all individuals as 50mg four times a day. This

is the optimal dosing as thiamine's absorption is saturable and giving large doses less often will result in poorer absorption. Supplementation with thiamine should be continued indefinitely for those with a history of significant alcohol abuse. Thiamine should also be continued in individuals who continue to engage in problem drinking as chronic alcohol reduces thiamine absorption and these individuals are particularly at risk of developing alcohol-related brain damage. Long term adherence to four times daily thiamine may be a challenge, but the importance of therapy should be underlined and individuals should be encouraged to take thiamine as often as they remember e.g. encourage to take with meals. Where there is evidence of poor dietary intake, treatment with a multivitamin preparation containing trace elements should also be considered in addition to thiamine.

Wernicke's Encephalopathy is an acute illness, which may be precipitated by alcohol withdrawal and is often under treated or missed.

If a patient presents with history of alcohol misuse and any of the following symptoms, this should be treated as a **medical emergency**:

- Acute confusion
- Ataxia/unsteadiness
- Decreased consciousness
- Unconsciousness/coma
- Unexplained hypotension with hypothermia
- Ophthalmoplegia/Nystagmus
- Memory disturbance

Pabrinex is contraindicated if the patient is known to have an allergy to any of the components of the product or a previous reaction is noted.

MHRA/CHM advice (September 2007)

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

1. This should not preclude the use parenteral thiamine particularly in patients at risk of Wernicke-Korsakoff syndrome where parenteral treatment with thiamine is essential.
2. Facilities for treating anaphylaxis should be available when parenteral thiamine is administered.

Please note: Risk of anaphylaxis is very low 1/1 million i.v. and 1/5 million i.m. It is far lower than for other im/iv preparations administered without special cautions. All efforts should be made to ensure adequate vitamin B supplementation or consequently failure to do so can have life-long implications.

Monitoring

The patient's blood pressure, pulse and temperature should be monitored at 4 hourly intervals throughout treatment with close observation for over sedation. The patient should be medically reviewed as necessary during the course of treatment.

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Adult chlordiazepoxide fixed dose regime

Patient's Name:						CHI Number:				
SADQ score:										
Severity of alcohol dependence		Moderate SADQ = 15-25				Severe SADQ = 30-40		Very severe SADQ = 40-60		
Day	Date	9am		1pm		5pm		10pm		Starting point
1		50mg		50mg		50mg		50mg		Very Severe ^b
		Admin by		Admin by		Admin by		Admin by		
2		45mg		45mg		45mg		45mg		Very Severe ^b
		Admin by		Admin by		Admin by		Admin by		
3		40mg		40mg		40mg		40mg		Severe ^a
		Admin by		Admin by		Admin by		Admin by		
4		35mg		35mg		35mg		35mg		Severe ^a
		Admin by		Admin by		Admin by		Admin by		
5		30mg		30mg		30mg		30mg		Severe ^a
		Admin by		Admin by		Admin by		Admin by		
6		25mg		25mg		25mg		25mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
7		20mg		20mg		20mg		20mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
8		15mg		15mg		15mg		15mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
9		10mg		10mg		10mg		10mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
10		10mg		10mg		10mg		10mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
11		5mg		5mg		5mg		5mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
12		5mg		5mg		5mg		5mg		Moderate
		Admin by		Admin by		Admin by		Admin by		
13		5mg		5mg		5mg		5mg		Moderate
		Admin by		Admin by		Admin by		Admin by		

- Only prescribe doses above 30mg four times a day in patients with severe dependence. Response must be regularly & closely monitored.
- Only prescribe doses above 40mg four times a day in patients with very severe dependence and never for older people or people with liver impairment.

Prescribe 1 pair of Pabrinex IMHP ampoules for the first 5 days of the reducing regime followed by oral thiamine 50mg four times a day thereafter.

Day 1	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 2	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 3	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 4	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 5	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Prescribed by:					

Older Adult chlordiazepoxide fixed dose regime

Patient's Name:						CHI Number:					
SADQ score:											
Severity of alcohol dependence		Moderate SADQ = 15-25				Severe SADQ = 30-40		Very severe SADQ = 40-60			
Day	Date	9am		1pm		5pm		10pm		Starting point	
1		25mg		25mg		25mg		25mg		Very Severe ^b	
		Admin by		Admin by		Admin by		Admin by			
2		20mg		20mg		20mg		20mg			
		Admin by		Admin by		Admin by		Admin by			
3		15mg		15mg		15mg		15mg			Severe ^a
		Admin by		Admin by		Admin by		Admin by			
4		15mg		15mg		15mg		15mg			
		Admin by		Admin by		Admin by		Admin by			
5		10mg		10mg		10mg		10mg			
		Admin by		Admin by		Admin by		Admin by			
6		10mg		10mg		10mg		10mg			Moderate
		Admin by		Admin by		Admin by		Admin by			
7		5mg		5mg		5mg		5mg			
		Admin by		Admin by		Admin by		Admin by			
8		5mg		5mg		5mg		5mg			
		Admin by		Admin by		Admin by		Admin by			
9		5mg		[REDACTED]		5mg		5mg			
		Admin by				Admin by		Admin by			
10		5mg				5mg		5mg			
		Admin by				Admin by		Admin by			
11		5mg				5mg		5mg			
		Admin by				Admin by		Admin by			
12		5mg				5mg		5mg			
		Admin by				Admin by		Admin by			
13		5mg				5mg		5mg			
		Admin by				Admin by		Admin by			

- Only prescribe doses above 10mg four times a day in patients with severe dependence. Response must be regularly & closely monitored.
- Only prescribe doses above 15mg four times a day in patients with very severe dependence

Prescribe 1 pair of Pabrinex IMHP ampoules for the first 5 days of the reducing regime followed by oral thiamine 50mg four times a day thereafter.

Day 1	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 2	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 3	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 4	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Day 5	Date:	Time:	Pabrinex IMHP 1 pair	Admin by	
Prescribed by:					

Notes on the use of the fixed dose regime

1. A SADQ test must be undertaken by the admitting/assessing doctor before prescribing the fixed dose regime.
2. Record the score on the form in the space provided.
3. Select the appropriate day to start based on the score obtained. Score out any days that are not required.
4. Insert the appropriate dates in the date column.
5. Write 'chlordiazepoxide fixed dose regime' on the patient's prescription sheet.
6. Chlordiazepoxide should initially be prescribed for breakthrough withdrawal symptoms. This should be prescribed on the 'as required' section of the prescription sheet. The dose should reflect the day on the chart selected e.g. if the patient starts at day 5, the as required dose would be 30mg given as required up to hourly. As the patient proceeds through the detox, this will need to be adjusted if it is still necessary.

Note: if the patient requires 2 or more as required doses reassess the point on the chart and consider moving the patient to an earlier day on the chart. This will require the first chart to be cancelled and a new one commenced.

If the as required dose is not used, consider discontinuing it after 48 hours and always on the completion of the regime.

For patients commenced on days 1 - 3 of the chart their total daily as required dose should not exceed 50mg.

7. Sign the form.
8. Nurses will enter their initials as each dose is administered and complete an appropriate entry on the in-patient prescription recording sheet.

SEVERITY OF ALCOHOL DEPENDENCE QUESTIONNAIRE (SADQ-C)¹

NAME _____ AGE _____ No. _____

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.

During that period of heavy drinking

1. The day after drinking alcohol, I woke up feeling sweaty.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
2. The day after drinking alcohol, my hands shook first thing in the morning.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
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 SOMETIMES OFTEN NEARLY ALWAYS
4. The day after drinking alcohol, I woke up absolutely drenched in sweat.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
5. The day after drinking alcohol, I dread waking up in the morning.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
6. The day after drinking alcohol, I was frightened of meeting people first thing in the morning.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
7. The day after drinking alcohol, I felt at the edge of despair when I awoke.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
8. The day after drinking alcohol, I felt very frightened when I awoke.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
9. The day after drinking alcohol, I liked to have an alcoholic drink in the morning.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
10. The day after drinking alcohol, I always gulped my first few alcoholic drinks down as quickly as possible.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS
11. The day after drinking alcohol, I drank more alcohol to get rid of the shakes.
ALMOST NEVER SOMETIMES OFTEN NEARLY ALWAYS

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

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12. The day after drinking alcohol, I had a very strong craving for a drink when I awoke.
ALMOST NEVER SOMETIMES OFTEN ALMOST ALWAYS

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 SOMETIMES OFTEN ALMOST ALWAYS

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

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

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

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.
NOT AT ALL SLIGHTLY MODERATELY QUITE A LOT

18. My hands would shake.
NOT AT ALL SLIGHTLY MODERATELY QUITE A LOT

19. My body would shake.
NOT AT ALL SLIGHTLY MODERATELY QUITE A LOT

20. I would be craving for a drink.
NOT AT ALL SLIGHTLY MODERATELY QUITE A LOT

SCORE

CHECKED BY:

ALCOHOL DETOX PRESCRIBED: YES/NO

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 regime 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 as well as the result of the SADQ.



There is no correlation between the SADQ and such parameters as the MCV or GGT.

Appendix 2

FAST ALCOHOL SCREENING TEST (FAST)

FAST questions

Record the scores in the boxes on the right.

<p>Question 1</p> <p>How often do you have:</p> <p> 6 or more units on one occasion? or 8 or more units on one occasion? </p> <p>Never = 0 Less than monthly = 1 Monthly = 2 Weekly = 3 Daily or almost daily = 4</p>	<p>Score</p> <p><input type="text"/></p>		
<p>If the response to this question is "never", the person is at low risk for alcohol-related problems, but bear in mind the drinking limits</p>	<p>If the response to this question is "less than monthly" or "monthly" go on to ask questions 2, 3 and 4</p>	<p>If the response to this question is "weekly" or "daily or almost daily" the person is a risky (hazardous), harmful or dependent drinker</p>	<p>Score</p> <p><input type="text"/></p> <p>Score</p> <p><input type="text"/></p> <p>Score</p> <p><input type="text"/></p>
<p>Question 2</p> <p>How often during the last year have you been unable to remember what happened the night before because you had been drinking?</p> <p>Never = 0 Less than monthly = 1 Monthly = 2 Weekly = 3 Daily or almost daily = 4</p>			
<p>Question 3</p> <p>How often during the last year have you failed to do what was normally expected of you because you had been drinking?</p> <p>Never = 0 Less than monthly = 1 Monthly = 2 Weekly = 3 Daily or almost daily = 4</p>			
<p>Question 4</p> <p>In the last year has a relative, friend, doctor or health worker been concerned about your drinking and suggested that you cut down?</p> <p>No = 0 Yes, on one occasion = 2 Yes, on more than one occasion = 4</p>			
<p>Add up the scores to the above questions and record below. The minimum score is 0 and the maximum score is 16.</p> <p>Total score: <input type="text"/> The score for hazardous drinking is 3 or more</p>			