Alcohol-use disorders: diagnosis and management of physical complications

NICE guideline: short version

Draft for consultation, December 2016

This guideline covers the care of adults and young people (aged 10 years and older) with any of the following physical health problems that are completely or partly caused by an alcohol-use disorder (harmful drinking or alcohol dependence):

- acute alcohol withdrawal (which occurs if a 'dependent' drinker suddenly stops drinking)
- lack of thiamine (also called vitamin B1), which can cause a condition called Wernicke's encephalopathy
- liver disease
- inflammation of the pancreas (pancreatitis).

Who is it for?

- Healthcare professionals
- Commissioners and providers
- People with alcohol-use disorders, their families and carers.

This guideline will update NICE guideline CG100 (published June 2010).

We have updated recommendation 1.3.1.1 on corticosteroid treatment for people with severe alcohol-related hepatitis.

You are invited to comment on the updated recommendation in this guideline. This is marked as **[2017]** because the evidence has been reviewed and the recommendation has been updated.

We have not updated recommendations shaded in grey, and cannot accept comments on them.

See Update information for a full explanation of what is being updated.

This version of the guideline contains the draft recommendations, context and recommendations for research. The supporting information and evidence for the 2017 recommendation is contained in the 2017 addendum. Evidence for the 2010 recommendations is in the full version of the 2010 guideline

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Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

1.1 Acute alcohol withdrawal

1.1.1 Admission to hospital

1.1.1.1 For people in acute alcohol withdrawal with, or who are assessed to be at high risk of developing, alcohol withdrawal seizures or delirium tremens, offer admission to hospital for medically assisted alcohol withdrawal. **[2010]**

1.1.1.2 For young people under 16 years who are in acute alcohol withdrawal, offer admission to hospital for physical and psychosocial assessment, in addition to medically assisted alcohol withdrawal. **[2010]**

1.1.1.3 For certain vulnerable people who are in acute alcohol withdrawal (for example, those who are frail, have cognitive impairment or multiple comorbidities, lack social support, have learning difficulties or are 16 or 17 years), consider a lower threshold for admission to hospital for medically assisted alcohol withdrawal. **[2010]**

1.1.1.4 For people who are alcohol dependent but not admitted to hospital, offer advice to avoid a sudden reduction in alcohol intake[1] and information about how to contact local alcohol support services. **[2010]**

1.1.2 Assessment and monitoring

1.1.2.1 Healthcare professionals who care for people in acute alcohol withdrawal should be skilled in the assessment and monitoring of withdrawal symptoms and signs. **[2010]**

1.1.2.2 Follow locally specified protocols to assess and monitor patients in acute alcohol withdrawal. Consider using a tool (such as the Clinical Institute Withdrawal Assessment – Alcohol, revised [CIWA–Ar] scale[2]) as an adjunct to clinical judgement. **[2010]**

1.1.2.3 People in acute alcohol withdrawal should be assessed immediately on admission to hospital by a healthcare professional skilled in the management of alcohol withdrawal. **[2010]**

1.1.3 Treatment for acute alcohol withdrawal

1.1.3.1 Offer pharmacotherapy to treat the symptoms of acute alcohol withdrawal as follows:

[1] While abstinence is the goal, a sudden reduction in alcohol intake can result in severe withdrawal in dependent drinkers.
[2] Sullivan JT, Sykora K, Schneiderman J et al. (1989) Assessment of alcohol withdrawal: the revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA-Ar). British Journal of Addiction 84:1353-1357

- Consider offering a benzodiazepine[3] or carbamazepine[4].
- Clomethiazole[5] may be offered as an alternative to a benzodiazepine or carbamazepine. However, it should be used with caution, in inpatient settings only and according to the summary of product characteristics. **[2010]**

1.1.3.2 People with decompensated liver disease who are being treated for acute alcohol withdrawal should be offered advice from a healthcare professional experienced in the management of patients with liver disease. **[2010]**

1.1.3.3 Offer information about how to contact local alcohol support services to people who are being treated for acute alcohol withdrawal. **[2010]**

1.1.3.4 Follow a symptom-triggered regimen[6] for drug treatment for people in acute alcohol withdrawal who are:

- in hospital **or**

[3] Benzodiazepines are used in UK clinical practice in the management of alcohol-related withdrawal symptoms. Diazepam and chlordiazepoxide have UK marketing authorisation for the management of acute alcohol withdrawal symptoms. However, at the time of consultation (December 2016), alprazolam, clobazam and lorazepam did not have UK marketing authorisations for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information. In addition, the summary of product characteristics (SPC) for alprazolam advises that benzodiazepines should be used with extreme caution in patients with a history of alcohol abuse. The SPC for clobazam states that it must not be used in patients with any history of alcohol dependence (due to increased risk of dependence). The SPC for lorazepam advises that use in individuals with a history of alcoholism should be avoided (due to increased risk of dependence).

[4] Although carbamazepine is used in UK clinical practice in the management of alcohol-related withdrawal symptoms, at the time of consultation (December 2016), it did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[5] Clomethiazole has a UK marketing authorisation for the treatment of alcohol withdrawal symptoms where close hospital supervision is also provided. However, at the time of consultation (December 2016), the SPC advises caution in prescribing clomethiazole for individuals known to be addiction-prone and to outpatient alcoholics. It also advises against prescribing it to patients who continue to drink or abuse alcohol. Alcohol combined with clomethiazole, particularly in alcoholics with cirrhosis, can lead to fatal respiratory depression even with short-term use. Clomethiazole should only be used in hospital under close supervision or, in exceptional circumstances, on an outpatient basis by specialist units when the daily dosage must be monitored closely.

[6] A symptom-triggered regimen involves treatment tailored to the person's individual needs. These are determined by the severity of withdrawal signs and symptoms. The patient is regularly assessed and monitored, either using clinical experience and questioning alone or with the help of a designated questionnaire such as the CIWA–Ar. Drug treatment is provided if the patient needs it and treatment is withheld if there are no symptoms of withdrawal.

- in other settings where 24-hour assessment and monitoring are available. **[2010]**

1.1.4 Management of delirium tremens

1.1.4.1 In people with delirium tremens, offer oral lorazepam[7] as first-line treatment. If symptoms persist or oral medication is declined, give parenteral lorazepam[7] or haloperidol[8]. ~~or olanzapine[9].~~ **[2010, amended 2017]**

1.1.4.2 If delirium tremens develops in a person during treatment for acute alcohol withdrawal, review their withdrawal drug regimen. **[2010]**

1.1.5 Management of alcohol withdrawal seizures

1.1.5.1 In people with alcohol withdrawal seizures, consider offering a quick-acting benzodiazepine (such as lorazepam[7]) to reduce the likelihood of further seizures. **[2010]**

1.1.5.2 If alcohol withdrawal seizures develop in a person during treatment for acute alcohol withdrawal, review their withdrawal drug regimen. **[2010]**

1.1.5.3 Do not offer phenytoin to treat alcohol withdrawal seizures. **[2010]**

1.2 Wernicke's encephalopathy

1.2.1.1 Offer thiamine to people at high risk of developing, or with suspected, Wernicke's encephalopathy. Thiamine should be given in doses toward

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[7] Although lorazepam is used in UK clinical practice in the management of delirium tremens, at the time of consultation (December 2016), it did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information. In addition, the SPC advises that use in individuals with a history of alcoholism should be avoided (due to increased risk of dependence).

[8] Although haloperidol is used in UK clinical practice in the management of delirium tremens, at the time of consultation (December 2016), it did not have a UK marketing authorisation for this indication. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information. In addition, the SPC advises caution in patients suffering from conditions predisposing to convulsions, such as alcohol withdrawal.

~~[9] Olanzapine is used in UK clinical practice in the management of delirium tremens. at the time of writing (May 2010), olanzapine did not have UK marketing authorisation for this indication. Informed consent should be obtained and documented. In addition, the SPC advises that the safety and efficacy of intramuscular olanzapine has not been evaluated in patients with alcohol intoxication.~~

the upper end of the 'British national formulary' range. It should be given orally or parenterally as described in recommendations 1.2.1.2 to 1.2.1.4. **[2010]**

1.2.1.2 Offer prophylactic oral thiamine to harmful or dependent drinkers:

- if they are malnourished or at risk of malnourishment **or**
- if they have decompensated liver disease **or**
- if they are in acute withdrawal **or**
- before and during a planned medically assisted alcohol withdrawal. **[2010]**

1.2.1.3 Offer prophylactic parenteral thiamine followed by oral thiamine to harmful or dependent drinkers:

- if they are malnourished or at risk of malnourishment **or**
- if they have decompensated liver disease

and in addition

- they attend an emergency department **or**
- are admitted to hospital with an acute illness or injury. **[2010]**

1.2.1.4 Offer parenteral thiamine to people with suspected Wernicke's encephalopathy. Maintain a high level of suspicion for the possibility of Wernicke's encephalopathy, particularly if the person is intoxicated. Parenteral treatment should be given for a minimum of 5 days, unless Wernicke's encephalopathy is excluded. Oral thiamine treatment should follow parenteral therapy. **[2010]**

1.3 Alcohol-related liver disease

1.3.1 Assessment and diagnosis of alcohol-related liver disease

1.3.1.1 Exclude alternative causes of liver disease in people with a history of harmful or hazardous drinking who have abnormal liver blood test results. **[2010]**

1.3.1.2 Refer people to a specialist experienced in the management of alcohol-related liver disease to confirm a clinical diagnosis of alcohol-related liver disease. **[2010]**

1.3.1.3 Consider liver biopsy for the investigation of alcohol-related liver disease. **[2010]**

1.3.1.4 When considering liver biopsy for the investigation of alcohol-related liver disease:

- take into account the small but definite risks of morbidity and mortality
- discuss the benefits and risks with the patient **and**
- ensure informed consent is obtained. **[2010]**

1.3.1.5 In people with suspected acute alcohol-related hepatitis, consider a liver biopsy to confirm the diagnosis if the hepatitis is severe enough to require corticosteroid treatment. **[2010]**

1.3.2 Referral for consideration of liver transplantation

1.3.2.1 Refer patients with decompensated liver disease to be considered for assessment for liver transplantation if they:

- still have decompensated liver disease after best management and 3 months' abstinence from alcohol **and**
- are otherwise suitable candidates for liver transplantation[10]. **[2010, amended 2017]**

1.3.3 Corticosteroid treatment for alcohol-related hepatitis

1.3.3.1 Offer corticosteroid[9] treatment to people with severe alcohol-related hepatitis and a discriminant function[10] of 32 or more, only after:

[9] Corticosteroids are used in UK clinical practice in the management of severe alcohol-related hepatitis. At the time of consultation (December 2016), prednisolone did not have a UK marketing authorisation for this indication. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[10] Maddrey's discriminant function (DF) was described to predict prognosis in alcohol-related hepatitis and identify patients suitable for treatment with steroids. It is 4.6 x [prothrombin time – control time (seconds)] + bilirubin in mg/dl. To calculate the DF using bilirubin in micromol/l divide the bilirubin value by 17.

- effectively treating any active infection or gastrointestinal bleeding that may be present
- controlling any renal impairment
- discussing the potential benefits and risks with the person and their family or carer, explaining that corticosteroid treatment:
  - has been shown to improve survival in the short term (1 month)
  - has not been shown to improve survival over a longer term (3 months to 1 year)
  - has been shown to increase the risk of serious infections within the first 3 months of starting treatment. **[2017]**

1.3.4 Nutritional support for alcohol-related hepatitis

1.3.4.1 Assess the nutritional requirements of people with acute alcohol-related hepatitis. Offer nutritional support if needed[11] and consider using nasogastric tube feeding. **[2010]**

1.4 Alcohol-related pancreatitis

1.4.1 Diagnosis of chronic alcohol-related pancreatitis

1.4.1.1 To inform a diagnosis of chronic alcohol-related pancreatitis use a combination of:

- the person's symptoms
- an imaging modality to determine pancreatic structure **and**
- tests of pancreatic exocrine and endocrine function. **[2010]**

1.4.1.2 Use computed tomography as the first-line imaging modality for the diagnosis of chronic alcohol-related pancreatitis in people with a history and symptoms suggestive of chronic alcohol-related pancreatitis. **[2010]**

[10] ~~See the nationally agreed guidelines for liver transplant assessment in the context of alcohol-related liver disease.~~

[11] See Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition. NICE guideline CG32 (2006).

1.4.2 Pancreatic surgery versus endoscopic therapy for chronic alcohol-related pancreatitis

1.4.2.1 Refer people with pain from chronic alcohol-related pancreatitis to a specialist centre for multidisciplinary assessment. **[2010]**

1.4.2.2 Offer surgery, in preference to endoscopic therapy, to people with pain from large-duct (obstructive) chronic alcohol-related pancreatitis. **[2010]**

1.4.2.3 Offer coeliac axis block, splanchnicectomy or surgery to people with poorly controlled pain from small-duct (non-obstructive) chronic alcohol-related pancreatitis. **[2010]**

1.4.3 Prophylactic antibiotics for acute alcohol-related pancreatitis

1.4.3.1 Do not give prophylactic antibiotics to people with mild acute alcohol-related pancreatitis, unless otherwise indicated. **[2010]**

1.4.4 Nutritional support for acute alcohol-related pancreatitis

1.4.4.1 Offer nutritional support[11] to people with acute alcohol-related pancreatitis:

- early (on diagnosis) **and**
- by enteral tube feeding rather than parenterally where possible. **[2010]**

1.4.5 Enzyme supplementation for chronic alcohol-related pancreatitis

1.4.5.1 Offer pancreatic enzyme supplements to people with chronic alcohol-related pancreatitis who have symptoms of steatorrhoea or poor nutritional status due to exocrine pancreatic insufficiency. **[2010]**

1.4.5.2 Do not prescribe pancreatic enzyme supplements to people with chronic alcohol-related pancreatitis if pain is their only symptom. **[2010]**

Terms used in this guideline

Acute alcohol withdrawal

The physical and psychological symptoms that people can experience when they suddenly reduce the amount of alcohol they drink if they have previously been drinking excessively for prolonged periods of time.

Alcohol dependence

A cluster of behavioural, cognitive and physiological factors that typically include a strong desire to drink alcohol and difficulties in controlling its use. Someone who is alcohol-dependent may persist in drinking, despite harmful consequences. They will also give alcohol a higher priority than other activities and obligations. For further information, please refer to: 'Diagnostic and statistical manual of mental disorders' (DSM-IV) (American Psychiatric Association 2000) and 'International statistical classification of diseases and related health problems – 10th revision' (ICD-10) (World Health Organization 2007).

Alcohol-related hepatitis

Alcoholic hepatitis.

Coeliac axis block

Pain relief by nerve block of the coeliac plexus.

CIWA-Ar scale

The Clinical Institute Withdrawal Assessment – Alcohol, revised (CIWA–Ar) scale is a validated 10-item assessment tool that can be used to quantify the severity of the alcohol withdrawal syndrome, and to monitor and medicate patients throughout withdrawal.

Decompensated liver disease

Liver disease complicated by the development of jaundice, ascites, bruising or abnormal bleeding and/or hepatic encephalopathy.

Harmful drinking

A pattern of alcohol consumption that is causing mental or physical damage.

Hazardous drinking

A pattern of alcohol consumption that increases someone's risk of harm. Some would limit this definition to the physical or mental health consequences (as in harmful use). Others would include the social consequences. The term is currently used by the World Health Organization to describe this pattern of alcohol consumption. It is not a diagnostic term.

Malnourishment

A state of nutrition in which a deficiency of energy, protein and/or other nutrients causes measurable adverse effects on tissue/body form, composition, function or clinical outcome.

Medically assisted alcohol withdrawal

The deliberate withdrawal from alcohol by a dependent drinker under the supervision of medical staff. Prescribed medication may be needed to relieve the symptoms. It can be carried out at home, in the community or in a hospital or other inpatient facility.

Splanchnicectomy

Surgical division of the splanchnic nerves and coeliac ganglion.

Putting this guideline into practice

[This section will be finalised after consultation]

NICE has produced tools and resources to help you put this guideline into practice.

[Optional paragraph if issues raised] Some issues were highlighted that might need specific thought when implementing the recommendations. These were raised during the development of this guideline. They are:

- [add any issues specific to guideline here]

Putting recommendations into practice can take time. How long may vary from guideline to guideline, and depends on how much change in practice or services is needed. Implementing change is most effective when aligned with local priorities.

Changes recommended for clinical practice that can be done quickly – like changes in prescribing practice – should be shared quickly. This is because healthcare professionals should use guidelines to guide their work – as is required by professional regulating bodies such as the General Medical and Nursing and Midwifery Councils.

Changes should be implemented as soon as possible, unless there is a good reason for not doing so (for example, if it would be better value for money if a package of recommendations were all implemented at once).

Different organisations may need different approaches to implementation, depending on their size and function. Sometimes individual practitioners may be able to respond to recommendations to improve their practice more quickly than large organisations.

Here are some pointers to help organisations put NICE guidelines into practice:

1. **Raise awareness** through routine communication channels, such as email or newsletters, regular meetings, internal staff briefings and other communications with all relevant partner organisations. Identify things staff can include in their own practice straight away.

2. **Identify a lead** with an interest in the topic to champion the guideline and motivate others to support its use and make service changes, and to find out any significant issues locally.

3. **Carry out a baseline assessment** against the recommendations to find out whether there are gaps in current service provision.

4. **Think about what data you need to measure improvement** and plan how you will collect it. You may want to work with other health and social care organisations and specialist groups to compare current practice with the recommendations. This may also help identify local issues that will slow or prevent implementation.

5. **Develop an action plan**, with the steps needed to put the guideline into practice, and make sure it is ready as soon as possible. Big, complex changes may take longer to implement, but some may be quick and easy to do. An action plan will help in both cases.

6. **For very big changes** include milestones and a business case, which will set out additional costs, savings and possible areas for disinvestment. A small project group could develop the action plan. The group might include the guideline champion, a senior organisational sponsor, staff involved in the associated services, finance and information professionals.

7. **Implement the action plan** with oversight from the lead and the project group. Big projects may also need project management support.

8. **Review and monitor** how well the guideline is being implemented through the project group. Share progress with those involved in making improvements, as well as relevant boards and local partners.

NICE provides a comprehensive programme of support and resources to maximise uptake and use of evidence and guidance. See our into practice pages for more information.

Also see Leng G, Moore V, Abraham S, editors (2014) Achieving high quality care – practical experience from NICE. Chichester: Wiley.

Context

In the UK, it is estimated that 24% of adults drink in a hazardous or harmful way[12] (for definitions of harmful and hazardous drinking see terms used in this guideline). Levels of self-reported hazardous and harmful drinking are lowest in the central and eastern regions of England (21–24% of men and 10–14% of women). They are highest in the North East, North West and Yorkshire and Humber (26–28% of men, 16–18% of women)[13]. Hazardous and harmful drinking are commonly encountered among hospital attendees; approximately 20% of patients admitted to hospital for illnesses unrelated to alcohol are drinking at potentially hazardous levels[14].

Continued hazardous and harmful drinking can result in alcohol dependence. An abrupt reduction in alcohol intake in a person who has been drinking excessively for a prolonged period of time may result in the development of an alcohol withdrawal syndrome. In addition, persistent drinking at hazardous and harmful levels can result in damage to almost every organ or system of the body.

[12] The NHS Information Centre (2009) Statistics on alcohol: England. Leeds: The Health and Social Care Information Centre
[13] North West Public Health Observatory (2007) Indications of public health in the English Regions 8: alcohol. Liverpool: Association of Public Health Observatories
[14] Royal College of Physicians (2001) Alcohol - can the NHS afford it? Recommendations for a coherent alcohol strategy for hospitals. London: Royal College of Physicians

This guideline covers key areas in the investigation and management of the following alcohol-related conditions in adults and young people (aged 10 years and older):

- acute alcohol withdrawal, including seizures and delirium tremens
- Wernicke's encephalopathy
- liver disease
- acute and chronic pancreatitis.

It does not specifically look at women who are pregnant, children younger than 10 years, or people with physical or mental health conditions caused by alcohol use, other than those listed above.

In the current update, we reviewed the evidence and updated the recommendation on corticosteroid treatment for people with severe alcoholic hepatitis.

More information

To find out what NICE has said on topics related to this guideline, see our web page on alcohol.

Recommendations for research

In 2010, the guideline committee made the following recommendations for research. The committee's full set of research recommendations is detailed in the full guideline.

1 Admission to hospital for acute alcohol withdrawal

What is the clinical and cost effectiveness of admitting people who attend hospital in mild or moderate acute alcohol withdrawal for unplanned medically assisted alcohol withdrawal compared with no admission and a planned medically assisted alcohol withdrawal with regard to the outcome of long-term abstinence?

Why this is important

People presenting at a hospital who are at risk of or have alcohol withdrawal seizures or delirium tremens need admission for medical management. People with

milder withdrawal are not usually admitted, but given advice and provided with information regarding local outpatient alcohol addiction services. One of the concerns with this model is that the opportunity for intervention may be lost and that many of these people may never contact addiction services. Given that abstinence is the goal, it may be that admission for these people maximises the likelihood of achieving this goal. The concerns with admission are that it is costly, the patients may not be motivated and there has been no opportunity for psychological input prior to the medically assisted withdrawal from alcohol.

The research should aim to compare the two models of treatment with regard to the primary goal of abstinence. Health economic analysis should aim to determine the cost effectiveness of each approach.

2 Dosing regimens for acute alcohol withdrawal

What are the safety and efficacy of symptom-triggered, fixed-dosing and front-loading regimens for the management of acute alcohol withdrawal?

Why this is important

Traditionally, acute alcohol withdrawal has been managed by administering medication, typically benzodiazepines, according to a predetermined tapered-dosing schedule over a specified number of days (with the option for additional doses for breakthrough symptoms). This is called fixed-dosing. In contrast, medication can be administered in response to a person's individual signs and symptoms (symptom-triggered) or by giving an initial 'loading' dose (front-loading) in conjunction with a symptom-triggered or 'as required' regimen.

The safety and efficacy of symptom-triggered or front-loading regimens in comparison to the 'traditional' fixed-dose regimen needs to be established in patients admitted to acute hospital settings who undergo unplanned acute alcohol withdrawal. Staff and patients' experiences in conjunction with objective measures of acute alcohol withdrawal need to be collected.

3 Drugs for the management of alcohol withdrawal

What is the efficacy and cost effectiveness of clomethiazole compared with chlordiazepoxide or carbamazepine or benzodiazepines for the treatment of acute

alcohol withdrawal with regard to the outcomes of withdrawal severity, risk of seizures, risk of delirium tremens, length of treatment and patient satisfaction?

Why this is important

Clomethiazole has powerful, short-acting, sedative, tranquilising and anticonvulsant properties which are mediated through an indirect effect on gamma-aminobutyric acid (GABA) receptors in the brain. It has fallen out of favour in many units for the management of acute alcohol withdrawal because of reports of dependence and concerns regarding over-sedation. These have been problems in the outpatient use of clomethiazole, but it has now been restricted to the inpatient setting, where clomethiazole may be of great value.

There are limited studies comparing clomethiazole with other agents. As such, an appropriately powered study comparing clomethiazole to chlordiazepoxide or carbamazepine or benzodiazepines with regard to the outcomes described above would help to define the role of this potentially very useful drug.

4 Assessment and monitoring

What is the clinical and cost effectiveness of interventions delivered in an acute hospital setting by an alcohol specialist nurse compared with those managed through acute hospital setting with no input from a specialist nurse?

Why this is important

Alcohol-related problems are an important public health problem in the UK. Many patients present to acute services and are managed according to local pharmacotherapeutic regimens. Coordination of the management of the acute withdrawal episode with the long-term management of the patient can be complex. Prevention of Wernicke's encephalopathy, assessment for liver and extra-hepatic disease, therapies targetting alcohol addiction and the long-term management of the patient's physical, mental and social wellbeing are all components of the care. It is considered that better management during the hospital admission may lead to better outcomes with regard to long-term abstinence and health. Studies investigating the impact of an alcohol specialist nurse on these outcomes are required.

5 Wernicke's encephalopathy

What is the clinical and cost effectiveness of the use of parenteral versus oral thiamine in preventing the first onset of Wernicke's encephalopathy in people undergoing medically assisted alcohol withdrawal?

Why this is important

Wernicke's encephalopathy has a devastating effect on the sufferer and can occur when people are withdrawing from alcohol. It is thought to be caused by a lack of thiamine due to poor diet and/or absorption at a time of increased requirement for the vitamin (for cerebral functions in particular), although little is known about the mechanisms involved. There is some theoretical and trial evidence to suggest that parenteral replacement elevates blood levels more quickly than oral replacement, however it is not known if this is clinically significant, and there is no convincing clinical evidence to suggest which route and dose of thiamine is most effective at preventing Wernicke's encephalopathy. This is important as parenteral dosing uses additional resources, is unpleasant for the patient and has a very small risk of anaphylaxis. Having a placebo arm is probably not acceptable, given the risks of significant brain damage.

Update information

A recommendation has been updated on corticosteroid treatment for people with severe alcoholic hepatitis.

This is marked as **[2017]** because the evidence has been reviewed and the recommendation has been updated

NICE proposes to delete a recommendation from the 2010 guideline because the evidence has been reviewed and the recommendation has been updated. Recommendations that have been deleted or changed sets out the change.

Where recommendations are shaded in grey and end **[2010]** the evidence has not been reviewed since the original guideline.

See also the original NICE guideline and supporting documents.

Recommendations that have been deleted or changed

Recommendations to be deleted

Recommendation in 2010 guideline	Comment
Offer corticosteroid treatment to people with severe acute alcohol-related hepatitis and a discriminant function of 32 or more. (1.3.3.1)	Replaced by: Offer corticosteroid treatment to people with severe alcohol-related hepatitis and a discriminant function of 32 or more, only after: • effectively treating any active infection or gastrointestinal bleeding that may be present • controlling any renal impairment • discussing the potential benefits and risks with the person and their family or carer, explaining that corticosteroid treatment: - has been shown to improve survival in the short term (1 month) - has not been shown to improve survival over a longer term (3 months to 1 year) - has been shown to increase the risk of serious infections within the first 3 months of starting treatment. **[2017]** (1.3.3.1)

Amended recommendation wording (change to meaning)

Recommendation in 2010 guideline	Recommendation in current guideline	Reason for change
In people with delirium tremens, offer oral lorazepam[12] as first-line treatment. If symptoms persist or oral medication is declined, give parenteral lorazepam[7], haloperidol[13] or olanzapine[14]. (1.1.4.1)	In people with delirium tremens, offer oral lorazepam[7] as first-line treatment. If symptoms persist or oral medication is declined, give parenteral lorazepam[7] or haloperidol[8]. **[2010, amended 2017]** (1.1.4.1)	Olanzapine has been removed because this formulation of olanzapine is no longer available.
Refer patients with decompensated liver disease to be considered for assessment for liver transplantation if they: • still have decompensated liver disease after best management and 3 months' abstinence from alcohol and • are otherwise suitable candidates for liver transplantation[15]. (1.3.2.1) [15] See the nationally agreed guidelines for liver transplant assessment in the context of alcohol-related liver disease.	Refer patients with decompensated liver disease to be considered for assessment for liver transplantation if they: • still have decompensated liver disease after best management and 3 months' abstinence from alcohol and • are otherwise suitable candidates for liver transplantation. **[2010, amended 2017]** (1.3.2.1)	The footnote has been removed because these guidelines are no longer available online.

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