

Alcohol-related liver disease

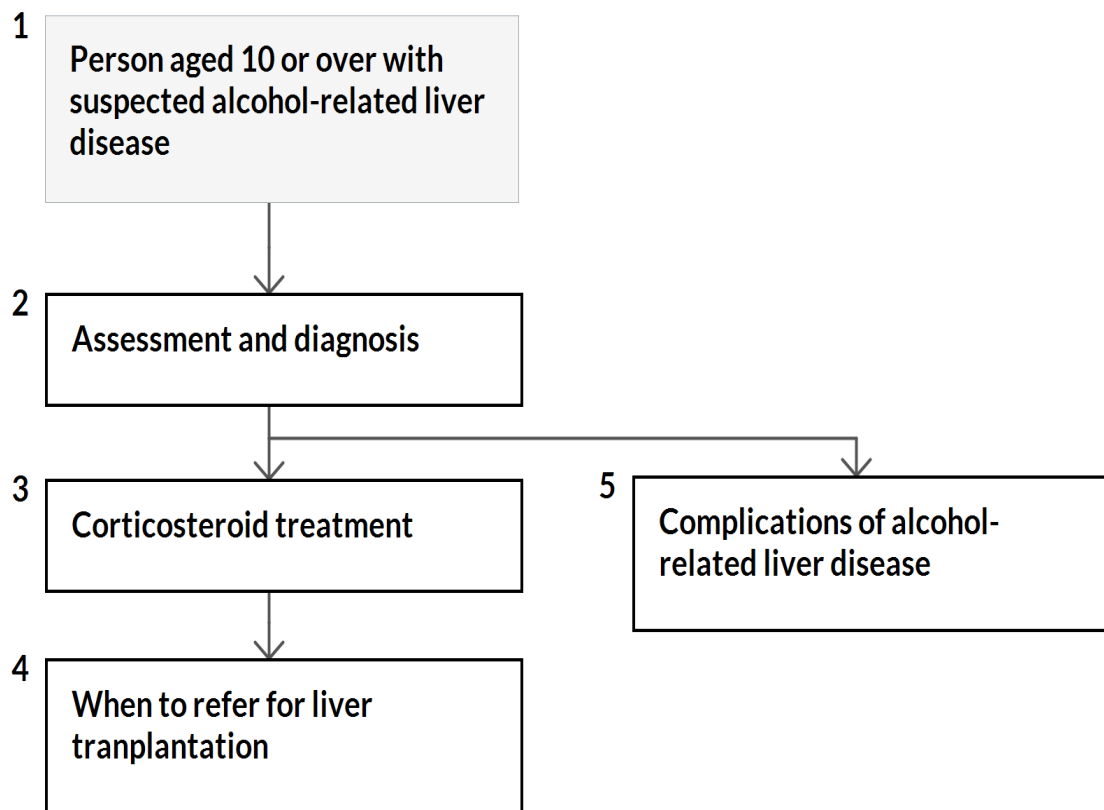
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

<http://pathways.nice.org.uk/pathways/alcohol-use-disorders>

NICE Pathway last updated: 12 May 2021

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Person aged 10 or over with suspected alcohol-related liver disease

No additional information

2 Assessment and diagnosis

Exclude alternative causes of liver disease in people with a history of [harmful \[See page 7\]](#) or [hazardous \[See page 7\]](#) drinking who have abnormal liver blood test results.

Refer people to a specialist experienced in the management of alcohol-related liver disease to confirm a clinical diagnosis of alcohol-related liver disease.

Consider liver biopsy for the investigation of alcohol-related liver disease.

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.

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.

Assess the nutritional requirements of people with acute alcohol-related hepatitis. Offer nutritional support if needed and consider using nasogastric tube feeding.

See [the NICE Pathways on cirrhosis](#) and [nutrition support in adults](#).

LiverMultiScan

NICE has published a [medtech innovation briefing on LiverMultiScan for liver disease](#).

3 Corticosteroid treatment

Offer corticosteroid treatment to people with severe alcohol-related hepatitis and a [DF \[See page 7\]](#) 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.

In April 2017, this was an off label use of prednisolone. See [prescribing medicines at NICE website](#).

4 When to refer for liver transplantation

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.

See [the NICE Pathways on liver cancers](#) and [liver conditions](#).

5 Complications of alcohol-related liver disease

Acute liver failure

NICE has published [interventional procedures guidance on extracorporeal albumin dialysis for acute liver failure](#) with **special arrangements** for clinical governance, consent, and audit or research.

NICE has published interventional procedures guidance that [extracorporeal whole liver perfusion for acute liver failure](#) should only be used in the context of **research**.

Focal liver lesions

The following recommendation is from [NICE diagnostics guidance on SonoVue \(sulphur hexafluoride microbubbles\) – contrast agent for contrast-enhanced ultrasound imaging of the liver](#).

Contrast-enhanced ultrasound with SonoVue is recommended for characterising focal liver lesions in adults whose cirrhosis is being monitored:

- if contrast-enhanced MRI is not clinically appropriate, is not accessible or is not acceptable to the person, **and**
- when unenhanced ultrasound scan is inconclusive.

NICE has written [information for the public on SonoVue](#).

Hepatic encephalopathy

Rifaximin for reducing recurrence of hepatic encephalopathy

The following recommendation is from [NICE technology appraisal guidance on rifaximin for preventing episodes of overt hepatic encephalopathy](#).

Rifaximin is recommended, within its marketing authorisation, as an option for reducing the recurrence of episodes of overt hepatic encephalopathy in people aged 18 years or older.

NICE has written [information for the public on rifaximin](#).

Oesophageal varices

See [the NICE Pathway on acute upper gastrointestinal bleeding](#).

Refractory ascites

Subcutaneous automated low-flow pump implantation

NICE has published [interventional procedures guidance on subcutaneous automated low-flow pump implantation for refractory ascites caused by cirrhosis with special arrangements](#) for clinical governance, consent, and audit or research:

Thrombocytopenia in person with chronic liver disease needing a planned invasive procedure

Avatrombopag

The following recommendation is from [NICE technology appraisal guidance on avatrombopag for treating thrombocytopenia in people with chronic liver disease needing a planned invasive procedure](#).

Avatrombopag is recommended, within its marketing authorisation, as an option for treating severe thrombocytopenia (that is, a platelet count of below 50,000 platelets per microlitre of blood) in adults with chronic liver disease having planned invasive procedures.

See [why we made the recommendation on avatrombopag](#).

NICE has written [information for the public on avatrombopag](#).

Lusutrombopag

The following recommendation is from [NICE technology appraisal guidance on lusutrombopag for treating thrombocytopenia in people with chronic liver disease needing a planned invasive procedure](#).

Lusutrombopag is recommended, within its marketing authorisation, as an option for treating severe thrombocytopenia (that is, a platelet count of below 50,000 platelets per microlitre of blood) in adults with chronic liver disease having planned invasive procedures.

See [why we made the recommendation on lusutrombopag](#).

NICE has written [information for the public on lusutrombopag](#).

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

<https://www.mdcalc.com/maddreys-discriminant-function-alcoholic-hepatitis> 'View MDCALC website'

Harmful drinking (high-risk drinking) is:

- a pattern of alcohol consumption that is causing mental or physical damage (ICD-10, DSM-V).
- consumption (units per week): Drinking 35 units a week or more for women. Drinking 50 units a week or more for men.

Hazardous drinking (increasing risk drinking) is:

- 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.
- consumption (units per week): Drinking more than 14 units a week, but less than 35 units a week for women. Drinking more than 14 units a week, but less than 50 units for men (Health Survey for England 2015: Adult alcohol consumption).

Glossary

Decompensated liver disease

(liver disease complicated by jaundice, ascites, variceal bleeding or hepatic encephalopathy)

Sources

Alcohol-use disorders: diagnosis and management of physical complications (2010, updated 2017) NICE guideline CG100

Avatrombopag for treating thrombocytopenia in people with chronic liver disease needing a planned invasive procedure (2020) NICE technology appraisal guidance 626

Lusutrombopag for treating thrombocytopenia in people with chronic liver disease needing a planned invasive procedure (2020) NICE technology appraisal guidance 617

[Rifaximin for preventing episodes of overt hepatic encephalopathy \(2015\) NICE technology appraisal guidance 337](#)

[SonoVue \(sulphur hexafluoride microbubbles\) – contrast agent for contrast-enhanced ultrasound imaging of the liver \(2012\) NICE diagnostics guidance 5](#)

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should [assess and reduce the environmental impact of implementing NICE recommendations](#) wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the

recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.