

## Gallstone disease overview

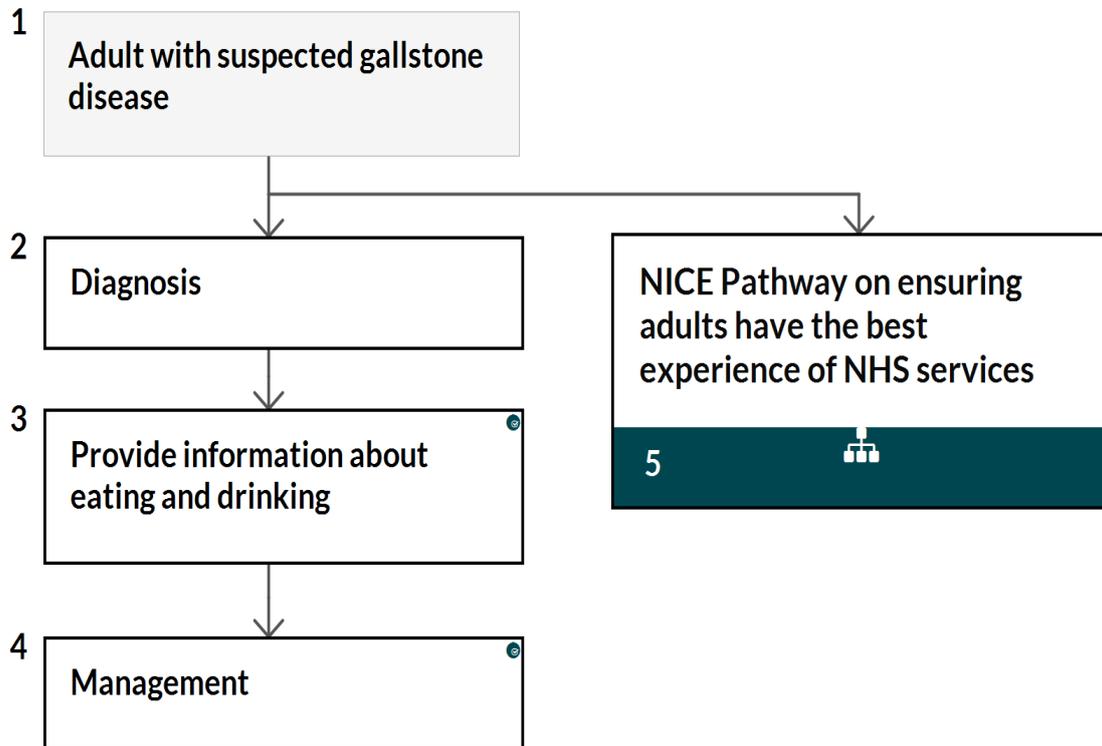
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

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/gallstone-disease>

NICE Pathway last updated: 03 November 2020

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



## 1 Adult with suspected gallstone disease

No additional information

## 2 Diagnosis

Offer liver function tests and ultrasound to people with suspected gallstone disease, and to people with abdominal or gastrointestinal symptoms that have been unresponsive to previous management.

Consider magnetic resonance cholangiopancreatography (MRCP) if ultrasound has not detected common bile duct stones but the:

- bile duct is dilated **and/or**
- liver function test results are abnormal.

Consider endoscopic ultrasound (EUS) if MRCP does not allow a diagnosis to be made.

NICE has published a medtech innovation briefing on [the SpyGlass direct visualisation system for diagnostic and therapeutic procedures during endoscopy of the biliary system](#).

Refer people for further investigations if conditions other than gallstone disease are suspected.

See [the NICE Pathway on gastrointestinal conditions](#).

## 3 Provide information about eating and drinking

Advise people to avoid food and drink that triggers their symptoms until they have their gallbladder or gallstones removed.

Advise people that they should not need to avoid food and drink that triggered their symptoms after they have their gallbladder or gallstones removed.

Advise people to seek further advice from their GP if eating or drinking triggers existing symptoms or causes new symptoms to develop after they have recovered from having their gallbladder or gallstones removed.

NICE has written information for the public explaining its guidance on [gallstone disease](#).

See [the NICE Pathways on alcohol-use disorders and diet](#).

## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

### 4. Advice to prevent symptoms

## 4 Management

### Gallbladder stones

Reassure people with asymptomatic gallbladder stones found in a normal gallbladder and normal biliary tree that they do not need treatment unless they develop symptoms.

Offer laparoscopic cholecystectomy to people diagnosed with symptomatic gallbladder stones.

Offer day-case laparoscopic cholecystectomy for people having it as an elective planned procedure, unless their circumstances or clinical condition make an inpatient stay necessary.

Offer early laparoscopic cholecystectomy (to be carried out within 1 week of diagnosis) to people with acute cholecystitis.

Offer percutaneous cholecystostomy to manage gallbladder empyema when:

- surgery is contraindicated at presentation **and**
- conservative management is unsuccessful.

Reconsider laparoscopic cholecystectomy for people who have had percutaneous cholecystostomy once they are well enough for surgery.

### Common bile duct stones

Offer bile duct clearance and laparoscopic cholecystectomy to people with symptomatic common bile duct stones or asymptomatic common bile duct stones.

Clear the bile duct:

- surgically at the time of laparoscopic cholecystectomy **or**
- with endoscopic retrograde cholangiopancreatography (ERCP) before or at the time of

- laparoscopic cholecystectomy.

If the bile duct cannot be cleared with ERCP, use biliary stenting to achieve biliary drainage only as a temporary measure until definitive endoscopic or surgical clearance.

Use the lowest-cost option suitable for the clinical situation when choosing between day-case and inpatient procedures for elective ERCP.

See the [NICE Pathway on preoperative tests](#).

### Single-incision laparoscopic cholecystectomy

NICE has published interventional procedures guidance on [single-incision laparoscopic cholecystectomy](#) with **normal arrangements** for clinical governance, consent and audit.

### Quality standards

The following quality statements are relevant to this part of the interactive flowchart.

1. Acute cholecystitis
2. Urgent endoscopic retrograde cholangiopancreatography within 72 hours
3. Emergency endoscopic retrograde cholangiopancreatography within 24 hours

## 5 NICE Pathway on ensuring adults have the best experience of NHS services

[See Patient experience in adult NHS services](#)

## Glossary

### **Asymptomatic common bile duct stones**

(stones that are found incidentally, as a result of imaging investigations unrelated to gallstone disease in people who have been completely symptom free for at least 12 months before diagnosis)

### **Asymptomatic gallbladder stones**

(stones that are found incidentally, as a result of imaging investigations unrelated to gallstone disease in people who have been completely symptom free for at least 12 months before diagnosis)

### **Gallbladder empyema**

(build-up of pus in the gallbladder, as a result of a blocked cystic duct)

### **Laparoscopic cholecystectomy**

(removal of the gallbladder through 'keyhole' surgery)

### **Percutaneous cholecystostomy**

(a procedure to drain pus and fluid from an infected gallbladder)

### **Symptomatic common bile duct stones**

(stones found on gallbladder imaging, regardless of whether symptoms are being experienced currently or whether they occurred sometime in the 12 months before diagnosis)

### **Symptomatic gallbladder stones**

(stones found on gallbladder imaging, regardless of whether symptoms are being experienced currently or whether they occurred sometime in the 12 months before diagnosis)

## Sources

[Gallstone disease: diagnosis and management](#) (2014) NICE guideline CG188

## 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.