

Having an ERCP

(endoscopic retrograde cholangio pancreatogram)

This leaflet explains more about having an ERCP, including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is an ERCP?

An ERCP is a type of x-ray and camera examination that enables your doctor to examine and/or treat conditions of the biliary system (liver, gall bladder, pancreas, pancreatic and bile ducts).

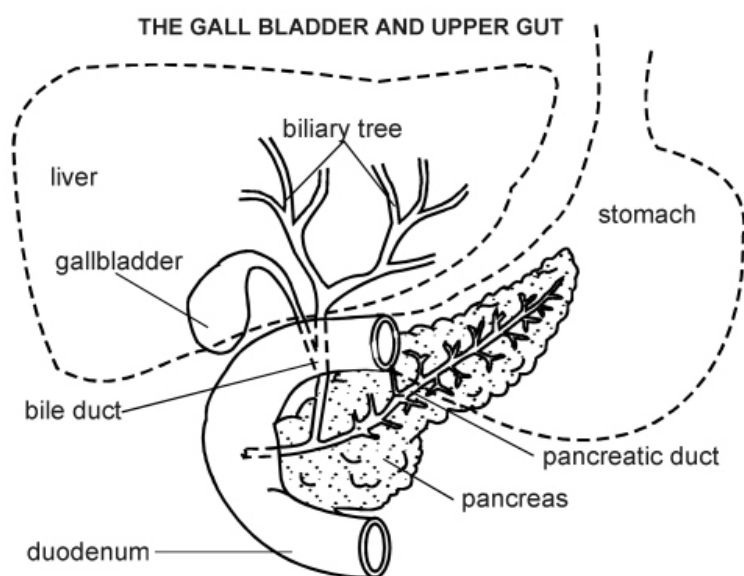


Diagram copy EMIS 2009, as distributed on www.patient.co.uk/diagram/Gallbladder-and-upper-GI-tract.htm
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Why is an ERCP performed?

The most common reasons to do an ERCP are jaundice (yellowing of the skin or eyes) or abnormal liver blood tests, especially if you have pain in the abdomen, or if a scan (ultrasound or CT scan) shows a blockage of the bile or pancreatic ducts. Blockages can be caused by stones, narrowing of the bile ducts (strictures), and growths or cancers of the pancreas and bile ducts.

During an ERCP, stents (small plastic or metal tubes) can be inserted into the bile ducts, to allow drainage of bile into the intestine. Stents can also be inserted into the duodenum for patients who have a blockage to the flow of food out of the stomach. An ERCP can give more information about the pancreas and bile ducts, and brushings and biopsies (specimens of cells for analysis) can be taken from the bile ducts or the pancreas.

Why should I have an ERCP?

An ERCP allows your doctor to gain detailed and accurate information about your pancreatobiliary system. It offers a less invasive option than open surgery for treatment of both the bile duct and the pancreas in particular obstructive jaundice (jaundice caused by a blockage in the bile drainage system). It is sometimes used to help remove pancreatic stones or to put a stent into a narrowed pancreatic duct. This can be helpful in dealing with pain.

What are the risks?

ERCP is generally safe but complications can sometimes occur.

Minor complications.

- Mild discomfort in the abdomen and a sore throat, which may last up to a few days.
- Loose teeth, crowns and bridgework can be dislodged, but this is rare.
- Mild inflammation of the pancreas (pancreatitis). This can happen in approximately five in 100 people. If pancreatitis happens, you will have pain in the abdomen, usually starting a few hours after the procedure and lasting for a few days. The pain can be controlled with painkillers and you will be given an intravenous (into a vein) infusion of fluids in hospital to keep you hydrated until the pain subsides.
- Inability to gain access to the bile or pancreatic ducts.
- Irritation to the vein in which medications were given is uncommon, but may cause a tender lump lasting for a couple of days.

Possible major complications.

- Severe pancreatitis can occur following an ERCP. We can treat this with medication or surgery. Although it is very rare, severe pancreatitis can be fatal (less than one in 500 cases).
- Infection in the bile duct can occur (cholangitis). You doctor may suggest a course of antibiotics either in hospital or at home.
- If you had a sphincterotomy (a small cut in the bottom of the bile duct) performed, there is a risk of bleeding which usually stops quickly by itself. If it does not stop by itself we may inject you with adrenalin through the endoscope. However, in severe cases, blood transfusion, a special x-ray procedure or an operation may be required to control the bleeding.
- Very frail and/or elderly patients can get pneumonia from stomach juices getting into the lung (approximately one in 500 cases).
- A hole may be made in the wall of the duodenum (perforation), either as a result of sphincterotomy or due to a tear made by the endoscope. This happens in less than one in 750 cases. It might require surgery to put right and may occasionally be fatal.
- A very rare complication is a reaction to one of the sedative drugs used.

Although ERCP carries risks, it is only carried out when the doctors have carefully balanced the risks of doing this test compared with doing any other test or operations, and the risks of doing nothing. Your doctor will be happy to discuss this with you further.

Are there any alternatives?

Percutaneous trans hepatic cholangiogram (PTC), performed under X-ray guidance, is the only alternative which allows therapeutic intervention (treatment). However PTC does not allow us to see the bile ducts directly and is associated with more complications.

No actual treatment can be performed with any of the alternatives listed below, as they are all diagnostic procedures.

- A CT (computerised tomographic) scan can be performed, but the investigation is less sensitive, small growths (less than 1cm) can be missed, no biopsies can be obtained, and no stents can be inserted.
- An MRI (magnetic resonance imaging) scan can be performed, but the investigation does not allow direct vision of the bile ducts, no biopsies can be obtained and no stents can be inserted. Also, you cannot have an MRI scan if you have some internal metalwork (e.g. pacemaker, joint replacements).
- An ultrasound scan can provide ultrasonic images of the biliary system, but a biopsy cannot be obtained and no stents can be inserted.
- An endoscopic ultrasound can be performed, but stones cannot be removed, a sphincterotomy (cut at the base of the bile duct) cannot be performed, and no stents can be inserted.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you

Before the procedure

If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example aspirin or clopidogrel) or anticoagulant medicines (for examples warfarin or rivaroxaban), please tell your doctor or the nurse as you may need to stop them temporarily before your procedure. Also tell your doctor or nurse if you have diabetes as you may need to alter the dose of your diabetes medicines, as you will need to fast before the procedure. Further information on stopping any medicines will be given to you when you come for pre-assessment. Please ask us if you have any questions.

Please let us know if you are taking any regular medicines (including anything you buy yourself over the counter or any herbal or homeopathic medicines) and if you have any allergies to any medicines.

You should continue to take all of your medications as normal, unless you have been told otherwise by the doctor or endoscopy nurse.

How can I prepare for an ERCP?

Before you have the ERCP, blood tests will be taken to check the clotting of your blood and your blood count.

In order for the doctor to be able to have a clear view with the camera, it is important that you do not eat or drink anything for six hours before the test.

You will usually be given an oral dose of antibiotic about an hour before the ERCP which you can take with a small amount of water.

We now have a health questionnaire that we ask you to complete which will help to expedite your admission or pre-assessment. This can be filled in on the day of your admission in reception. There is an electronic copy which can be emailed in advance on our Endoscopy web page via the trust website.

<https://www.guysandstthomas.nhs.uk/our-services/gastroenterology-and-hepatology/endoscopy.aspx#na>

When you arrive at the Endoscopy Unit

On arrival, please give your name to the receptionist or nurse. Please be aware that we have our endoscopist teams running up to five procedure rooms at the same time so sometimes another patient who arrived after you may be called in before you are. This does not mean you have been forgotten, but that the other person is on a different list to you. We do everything we can to avoid keeping you waiting any longer than necessary, but because every procedure takes a different length of time to complete, sometimes it's hard to give exact timings. We'll update you regularly as to how long you are likely to be with us. But please be prepared to be with us for the whole morning or afternoon, depending on whether you are a morning or afternoon admission.

At check in we will ask you to wait in the waiting area until you are seen by an endoscopy nurse, who will ask you about your medical history. Please tell the nurse if you have had any reactions or allergies to other examinations in the past.

We will ask you to take off all your jewellery before the examination this is because you should not wear any metal for the technique we use to during the procedure to reduce bleeding. Because of this, you may wish to leave any valuable jewellery at home, as we cannot be responsible for any valuables lost while in the unit.

You will be asked to remove all of your clothing and change into a gown and some dignity disposable underwear. You may want to bring your dressing gown and slippers with you (we do supply non slip socks). Once you are ready you will be taken to the second waiting area, signposted 'sub wait area.' Your endoscopist will explain more about the procedure and answer any questions you may still have.

What happens during the procedure?

ERCPs at Guy's and St Thomas' are performed by specialist consultants - gastroenterologists, assisted by specialist registrars.

Before the procedure starts, a nurse will attach monitors to one of your fingers to record your pulse and oxygen level, as well as monitors of your blood pressure and heart rhythm. You may be given a local anaesthetic throat spray to help to numb the throat. You will need to lie on your left side and a plastic mouth guard will be placed in your mouth. This enables the telescope to pass through your mouth and oxygen to be administered to you throughout the examination.

You will be given an injection of intravenous sedation and painkiller through a small needle in the back of your hand or arm. These medicines (known as conscious sedation), will relax you and may make you drowsy but will not necessarily put you to sleep. You will hear what is said to

you and be able to respond to any instructions given to you. A nurse will sit by your head and monitor you for the whole of the procedure. Once you are drowsy, a flexible tube about the width of an index finger, with a tiny camera on the end of it (duodenoscope) will be passed through your mouth, down your gullet, into the stomach, and then into the top part of the small intestine (duodenum). During the procedure, the doctor will insert a fine wire through the scope into the bile ducts and inject a dye which shows up on X-ray. X-rays of various parts of your biliary or pancreatic system will be taken.

If the procedure is being performed to remove stones from the bile or pancreatic duct, a small cut (sphincterotomy) may be made in the lower end of the bile duct to allow a fine tube to pass through. This also allows a small basket or balloon to be inserted to grasp a stone, and for any stones that may get into the bile duct in future to easily pass into the intestine.

Specimens may be taken from the bile ducts using a small brush or forceps, and a plastic or metal tube (stent) may be inserted to help with the drainage of bile or pancreatic juice.

How long does the procedure take?

The actual procedure lasts between fifteen minutes and one and a half hours, but half an hour is an average time.

Other specialist ERCP procedures

You will be informed if you will be having a SpyGlass ERCP

A SpyGlass is a thin endoscope called a cholangioscope that is passed through the duodenoscope into the bile duct to allow direct vision of the bile duct. The system provides the ability to use specialist equipment to break up and fragment bile or pancreatic duct stones (lithotripsy) using other methods not usually performed during standard ERCP. It also allows us to sample suspicious areas if there is a concern. Although ERCP is usually an adequate first step to diagnose and treat most bile and pancreatic ducts diseases, SpyGlass is a longer procedure usually done under general anaesthetic, with a higher risk of side effects or complications which your doctor will discuss with you.

Will I feel any pain?

This procedure is generally performed under conscious sedation and on occasion general anaesthetic (GA), please note your referring doctor will have notified you if you were to have this under a GA.

We will administer sedation and an opiate pain killer before and during your procedure to make you as comfortable as possible. You may experience cramping abdominal pain during or after the procedure from the air that we use to inflate your duodenum. You may also experience short periods of discomfort or pain from certain parts of the procedure which should soon disappear.

We will give you pain killing suppositories (into your back passage) before the end of the procedure to reduce the risk of pancreatitis. Afterwards, simple pain killer tablets, eg paracetamol, may be taken. Taking peppermint (eg as peppermint tea or peppermint water) can help to pass the air.

If you develop severe abdominal pain, please inform your nurse immediately. If you have gone home, consult your GP or go to the nearest Emergency Department (A&E). (Please take your endoscopy report with you).

What happens after the procedure?

- The nurse will monitor your pulse and blood pressure regularly and observe you for any complications. Most complications become apparent within six hours of the procedure, so you will remain under observation for that time.
- You will need to stay in the endoscopy unit until you are fully awake, which usually takes at least one hour. You will need to stay in the endoscopy unit under observation for six hours after the procedure, unless you are being transferred back to your own hospital by ambulance.
- If you are going home after your procedure, you will need to be escorted home by a responsible adult.
- Most of the time, you can eat as normal once you are fully awake. However, depending on the type of treatment you had during the procedure, you may be asked to fast (not eat anything) for 12 hours or more afterwards.
- You should continue to take your usual medications, unless we tell you otherwise. If you have been asked to stop any medicines before the procedure, we will confirm when to restart these before you leave the endoscopy unit.
- Your doctor or nurse will talk you through the results of the procedure, but sometimes you may be sleepy and not be able to remember the details. The results will be sent to your referring doctor (this can be either your GP or hospital doctor). If a follow-up appointment is necessary, it will be sent to you by post.

What do I need to do after I go home?

The sedation lasts longer than you may think, so in the first 24 hours after your examination, you should not:

- drive or ride a bicycle
- operate machinery or do anything requiring skill or
- drink alcohol
- take sleeping tablets
- go to work
- make any important decisions, sign contracts or legal documents.

If you choose to have sedation or general anaesthetic, **you must arrange for a relative or friend to take you home approximately one hour after the test.** This person should be 18 years of age or older. It is recommended that someone stays with you overnight. You will not be able to drive or operate any machinery for the remainder of the day and will need to rest quietly at home. **Please note that your appointment will be cancelled on the day if you wish to have sedation but have not organised an escort home.** . If you are unable to arrange someone to collect you, please contact us to discuss alternative arrangements.

If you develop severe abdominal pain, a fever, black faeces (melaena), jaundice or are unable to stop vomiting (being sick), please consult your GP or go to an Emergency Department (A&E) with your endoscopy report that you were discharged with.

It is important that you tell your GP or the A&E doctor that you have had an ERCP in order for them to contact the Gastroenterology team via the hospital switchboard (020 7188 7188) for specialist advice.

Will I have a follow-up appointment?

If your results indicate that your next step is a follow-up appointment and you do not already have one scheduled, if it is urgent this will be given to you on the day of your examination, otherwise our Patient Access Team will contact you to agree an appropriate clinic date.

You may be informed after your procedure that your follow up is a virtual clinic, this is when the clinical team review your endoscopy and biopsy results without you being present to make a decision on next steps for you based on the results. You and your GP will then receive an outcome letter from that clinic informing you if you need to return to an outpatient clinic or if you can be discharged back to your GP.

Delays to your appointment

We also deal with emergencies. These can take priority over your appointment, meaning we may have to ask you to wait. We apologise in advance if this occurs but please be patient with us and check at the reception desk if you are concerned.

Other questions

Please see our Guy's and St Thomas Hospital Gastroenterology and Hepatology web page regarding other Endoscopy frequently asked questions and answers.

<https://www.guysandstthomas.nhs.uk/our-services/gastroenterology-and-hepatology/overview.aspx>

Preparation checklist

- If you are planning or have been advised to have sedation arrange for a friend or relative (18 years of age or older) to escort you home after your appointment.
- If you do not organise an escort, or if s/he is under 18 years old, we will not be able to give you sedation and the procedure may be cancelled.
- Make a note of the date of your appointment.
- If you are taking medications to prevent blood clots please contact us for advice before your appointment.
- DO NOT eat anything for six hours before your appointment or drink anything for four hours before. You may have small sips of water for up to two hours before.
- Wear loose-fitting clothes on the day of the test.

Contact us

If you have a question or concern after the ERCP and you are an inpatient please speak to your nurse. If you need to change or cancel your appointment please ring 020 7188 8887.

If you have any questions, problems or concerns, please contact the endoscopy unit staff for advice (Monday-Saturday 9am-5pm):

t: 020 7188 7188 ext 54059 for Nurse in charge

t: 020 7188 7188 ext: 54046 St Thomas Reception desk

In case of emergency: Out of hours (6pm until 8am the next day and on Saturdays and Sundays): **t:** 020 7188 7188 and ask to be put through to the On-call gastroenterology registrar (via Rota watch).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. **t:** 020 7188 8748, Monday to Friday, 9am to 5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. **t:** 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111

NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. **w:** www.nhs.uk

Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** www.guysandstthomas.nhs.uk/leaflets, or **e:** patientinformationteam@gstt.nhs.uk

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