

Having an ERCP (endoscopic retrograde cholangio pancreatogram)

The aim of this information sheet is to help answer some of the questions you may have about having an ERCP. It explains what it is, why it is done, the benefits, risks and alternatives of the procedure, as well as what you can expect when you come to hospital.

If you have any questions or concerns, please do not hesitate to speak to the 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).

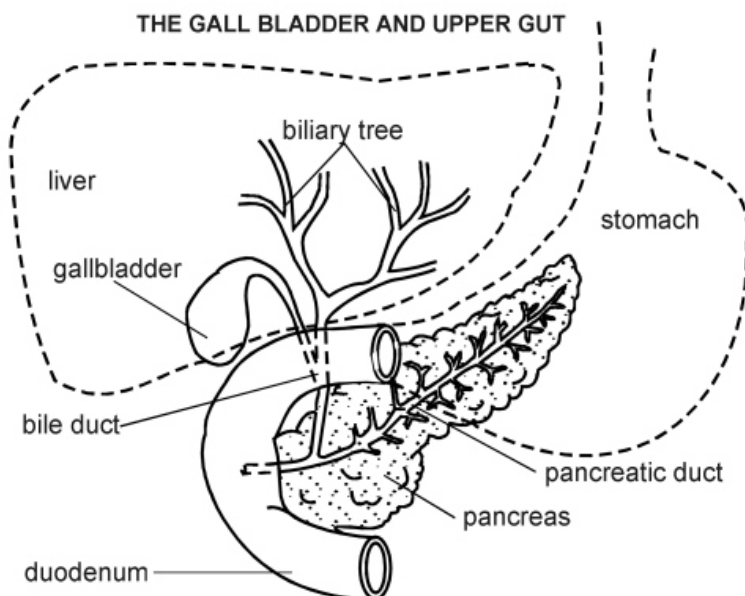


Diagram (c) EMIS 2009 as distributed at:
www.patient.co.uk/diagram/Gallbladder-and-upper-GI-tract.htm
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Why is an ERCP performed?

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.

What happens during the ERCP?

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 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 into the bile ducts and inject 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.

What are the benefits – why should I have an ERCP?

An ERCP allows your doctor to gain detailed and accurate information about your pancreatobiliary system. It often allows treatment of 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).
- If sphincterotomy (a small cut in the bottom of the bile duct) is 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.

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.
- **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.**

How can I prepare for the 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 be asked to undress and put on a hospital gown and to remove your jewellery, and false teeth, if you have them. 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.

If you are taking any blood thinning medicines (e.g. warfarin, rivaroxaban, aspirin, clopidogrel), please speak to your hospital doctor or nurse, as you may need to stop these prior to your ERCP. Also, please inform your hospital doctor if you are a diabetic.

If you have any questions about any other of your medicines, please discuss with your GP, or contact any of the numbers at the end of this information sheet.

Asking for your consent

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with the ERCP, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. It is your right to have a copy of this form. You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask us for one.

How long does an ERCP take?

The actual procedure lasts between 15 minutes and one and a half hours, but half an hour is an average time.

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.

Will I feel any pain?

You may experience some mild stomach cramps from the air that was introduced into your stomach during the procedure. These will soon disappear. We will give you pain killing suppositories (into your back passage) before the end of the procedure to prevent pancreatitis. Afterwards, simple pain killer tablets, e.g. paracetamol, may be taken. Taking peppermint (e.g. 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 A&E department.

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 Endoscopy.
- The effect of the sedative can last up to 24 hours so you should not drive, operate machinery or drink alcohol during that time.
- 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?

Once you get home, you can eat and drink as normal.

The effect of the sedative can last up to 24 hours so you should not drive, operate machinery or drink alcohol during that time, and a responsible adult should be with you for the first night after the procedure. You will be able to return to work the following day, and resume normal activities.

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 the A&E department.

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 you need a follow up appointment, this will be posted out to you for the next available clinic, or if it is urgent, you will be given your appointment on the same day.

Contact us

If you have a question or concern after the ERCP, if you are an inpatient, please speak to your nurse.

If you were an outpatient, please telephone the Endoscopy Unit, during working hours:

- **Clinical nurse specialist** on 020 7188 2673 (9am – 5pm)
- **Secretary** for Dr Wilkinson on 020 7188 2499 (9am – 5pm)
- **Secretary** for Dr Wong on 020 7188 2486 (9am – 5pm)
- **Secretary** for ERCP bookings on 020 7188 2491 (9am – 5pm)
- **Secretary** for Mr Atkinson on 020 7188 2578 (9am – 5pm)

Endoscopy Unit (8am – 5pm) on 020 7188 7188. Dial extension 54059 as soon as main switchboard answers

- **Dimbleby Cancer Care.** There is a drop in service that provides information and support for patients with cancer:
St Thomas' Hospital – Lower Ground Floor, Lambeth Wing, outside Clinical Oncology
Guy's – Oncology Outpatients Department, Ground Floor, Tabard Annexe
t: 020 7188 5918 **e:** RichardDimblebyCentre@gstt.nhs.uk
w: www.dimblebycancer.org

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 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Leaflet number: 2559/VER3

Date published: December 2013

Review date: December 2016

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