

Having an ERCP

Information and advice for patients

Endoscopy

What is an ERCP?

ERCP stands for Endoscopic Retrograde Cholangio Pancreatography. It is an examination of the shape and contents of the ducts (tubes) leading from the liver and pancreas into the intestine. It involves an endoscope (a thin, flexible tube with a bright light on the end) being passed through your mouth and stomach and into your duodenum (the first part of your small intestine) where the ducts from the liver and pancreas drain through a small opening.

What are the benefits of the procedure?

The benefit of an ERCP is that it can help to diagnose the cause of your problems and rule out other conditions. If you have gallstones these can also be removed during the procedure. If there is a blockage in any of the tubes, a small tube (stent) can be inserted to open the blockage.

What are the risks of the procedure?

- There is a slight risk of damage to your teeth, crowns or bridgework so please tell the nurse if you have crowns or have had any bridgework.
- In less than 1 in 200 cases a small hole or tear may be made in the stomach, oesophagus or duodenum. If this happens you would need to stay in hospital and in rare cases could need an operation to repair the damage.
- A rare complication is a reaction to the intravenous sedative and pain relief medication. To reduce this chance, please tell your doctor if you are allergic to anything.
- If the doctor needs to make a cut there is a risk that this could cause bleeding. This occurs in 1 out of 50 patients. It usually stops on its own but if it doesn't then it could be serious enough for you to be admitted to hospital and need a blood transfusion or surgery.
- In 1 in 10 patients the procedure cannot be completed. Reasons for this include food or blockage in the digestive system or complications during the procedure. If this happens your doctor may recommend another ERCP or a different procedure.
- Infection or inflammation of the bile duct and/or gall bladder may occur. This risk of this is less than 1 in 100. You will be given antibiotics for this.

- Up to 3 in 100 patients will develop pancreatitis (inflammation of the pancreas) after this procedure, causing abdominal (tummy) pain. This will usually settle but in rare cases may develop into severe pancreatitis.
- Like all tests, there is a risk the procedure will not show up all abnormalities.

If you have any questions about the risks of this procedure please ask the doctor doing the test or the person who has referred you for it.

What are the alternatives to this procedure?

An alternative investigation that will give the same information involves putting a needle into your liver and injecting dye which will then be picked up on X-ray. However this is more uncomfortable than an ERCP and treatment such as removing gallstones can't be done at the same time if needed. Magnetic resonance (MRI) scans or an endoscopic ultrasound can also show much of the same information, but again treatment can't be given at the same time.

What are the risks of not having the procedure?

If you do not have the test, we may not be able to detect an abnormality that could need further treatment. Please discuss this with your doctor.

What do I need to do before I attend for an ERCP?

If you need the help of an interpreter to understand any of this information, or on the day of the procedure, please contact us as soon as possible.

If you are unable to attend your appointment for any reason, please let us know as soon as possible so that your appointment can be offered to somebody else. If you fail to attend without notifying us then you may not be offered another appointment.

Contact details

Endoscopy Unit:

Monday – Saturday 8am – 6.30pm

Telephone: 0121 507 5318 or 0121 507 2796

If your symptoms have improved the test will still need to be performed as we need to check for any abnormality in your stomach.

Please do not bring any valuables or jewellery to the hospital, or wear nail varnish or lipstick.

Preparing your stomach

To allow a clear view during your ERCP your stomach must be empty. Do not have anything to eat or drink for at least 6 hours before the test. If you take medication for a heart condition, high blood pressure or asthma please take this with a small sip of water.

Medication

You may continue to take antacids e.g., Gaviscon or Asilone if required but not within 3 hours of the test.

If you take diabetic tablets or insulin, or tablets that thin the blood (such as warfarin, dabigatran, apixaban, rivaroxaban, edoxaban, clopidogrel/Plavix, prasugrel) please contact the unit as your appointment may need to be altered and you may need additional information.

You may continue to take your other usual medication. Please bring any medication you are currently taking (including sprays and inhalers) with you to your appointment, and details of any allergies or reactions to medicines in the past.

What happens when I arrive at the hospital?

Most ERCPs are performed on patients already in hospital, but if you are having this as an outpatient please report to the X-ray department (Sandwell patients) or the endoscopy department (City patients) where a receptionist will check your details and direct you to the waiting area.

To respect the privacy of other patients, we do not usually allow friends or relatives to stay with you whilst you are attending for the test.

A nurse will then explain the procedure to you, to make sure you understand the benefits and possible risks as detailed in this leaflet. The staff will want you to be as relaxed as possible for the test and will not mind answering questions. You will also see the doctor who will perform the test, and provided you are happy for the procedure to be performed, they will ask you to sign your consent form. The form also asks for consent for further procedures that may be necessary.

You will be asked to change into a hospital gown for the procedure. The nurse will also check your pulse and blood pressure and insert a small plastic tube (cannula) into your hand or arm using a needle.

You will need to remove dentures, glasses, contact lenses and any jewellery or metal objects before the procedure.

What happens during the procedure?

The ERCP will take place in a private examination room with you, the doctor, radiographer and nurses present. Sometimes students or trainee doctors will be there too, please let us know if you would prefer them not to be. In the examination room you will be made comfortable on the couch and will be asked to lie on your left side. The whole examination takes about 30 minutes.

1. You will be given oxygen through small tubes placed gently in your nostrils. A clip will be attached to a finger or ear-lobe so that the levels of oxygen in the blood can be monitored. Your blood pressure may also be measured automatically during the procedure using a small cuff around your arm.
2. You will be given sedation through the cannula in the back of your hand or arm. This will make you sleepy and although you will be awake, you may not remember the procedure taking place afterwards.
3. To keep your mouth slightly apart and to protect your gums, a plastic mouthpiece will be put gently between your teeth.
4. The endoscope will be passed through your mouth and stomach and into your duodenum (the first part of your small intestine) where the ducts from the liver and pancreas drain

through a small opening. This won't interfere with your breathing and will not cause any pain, but may be uncomfortable.

5. A fine plastic tube called a catheter is placed inside the opening and X-ray dye is injected into the ducts.
6. X-rays are taken of the area and the dye will show up on the X-rays. The dye passes harmlessly out after the procedure.
7. If gallstones need to be removed, a small cut (sphincterotomy) can be made by an electrically heated wire, which you will not feel. The stones can then be removed or broken into pieces to be removed. If there is a blockage, small tubes (stents) can be inserted to open these.

During the procedure you will be on your left side with your left hand behind you and sometimes rolled onto your stomach. If you get a lot of saliva in your mouth, the nurse will clear it using a suction tube, like the one used at the dentist.

What happens after the procedure?

After the procedure bloating, abdominal discomfort and a sore throat are normal for a few hours. You will need to stay on the unit to rest until you have recovered well enough from the sedation. A nurse will monitor your recovery.

If you are having the procedure as an outpatient it is essential that a responsible adult comes to pick you up from the unit and accompanies you home by car or taxi. Public transport is not suitable.

When you arrive home it is important to rest quietly for the remainder of the day with someone to look after you overnight. It is advisable to have the following day off work.

Sedation can impair your reflexes and judgement. For the first 24 hours following sedation do not:

- Drive a car - it is illegal to drive under the influence of midazolam (a medication used for procedural sedation).
- Drink alcohol
- Take sleeping tablets
- Operate any machinery or electrical items; even a kettle
- Work at heights (including climbing ladders or onto chairs)
- Sign any legally binding documents

When will I know the results?

The test results will be explained to you before you are discharged from the unit.

You will also be given a written report of your procedure and a copy of the results will be sent to your GP. If you need one, you will be given a clinic appointment.

How to contact us

If you have any questions or concerns please contact us.

Endoscopy unit

0121 507 5800 or 0121 507 2796

Monday - Friday, 8.00am - 6.30pm

If you are unable to keep your appointment, please telephone one of the above numbers as soon as possible so the appointment can be allocated to another patient.

Further information

For more information about our hospitals and services please see our website

www.swbh.nhs.uk, or follow us on X @SWBHnhs and Facebook www.facebook.com/SWBHnhs.

Sources used for the information in this leaflet

- American Society for Gastrointestinal Endoscopy, 'Guidelines on complications of ERCP', Volume 75, No.3, 2012
- European Society of Gastrointestinal Endoscopy (2020) ERCP-related adverse events: Guideline. Available at: <https://www.bsg.org.uk/clinical-resource/ercp-related-adverse-events-european-society-of-gastrointestinal-endoscopy-esge-guideline/> [Accessed 7th September 2023]
- British Society of Gastroenterology (2017). Updated guideline on the management of common bile duct stones (CBDS).
- Gastrointestinal Endoscopy Journal (Freeman et al), 'Adverse outcomes of ERCP', Volume 56, No.6, 2002
- Gastrointestinal Endoscopy Journal (Freeman et al), 'Risk factors for post-ERCP pancreatitis: a prospective, multicentre study', Volume 54, No.4, 2001

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