

# Endoscopic Retrograde Cholangio-Pancreatography (ERCP)

## An Information Guide

Advice Leaflet  
Medical Division

Please read this information leaflet carefully. It gives relevant information about your test and how to prepare for it. Please note that the test may also be called an endoscopy or a camera test.

This leaflet will help to explain the procedure and allay some of the anxieties that you may have about it.

If you have any concerns or questions, the endoscopist or endoscopy nurse who assesses you before the procedure will be happy to discuss them with you.

You have been advised to have an ERCP (Endoscopic Retrograde Cholangio-Pancreatography) to help find and treat the cause of your symptoms. This test allows the examination of the pancreas, gallbladder and bile ducts.

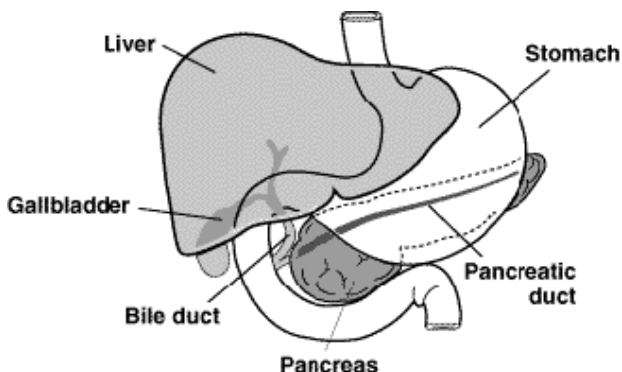
## Who needs ERCP?

This procedure is usually recommended for people with the following conditions:

- Individuals with bile duct stones, tumours, narrowing or other abnormalities of the bile ducts, gall bladder, or pancreas
- Individuals with evidence of blockage of the bile duct identified by ultrasound, CT scan or other diagnostic test
- Individuals with unexplained recurrent pancreatitis
- Individuals with unexplained jaundice
- Individuals with unexplained abnormalities of liver function tests

## What is an ERCP?

ERCP is a procedure, which allows the doctor to take detailed X-rays of the biliary and pancreatic ducts. The procedure will take place in the x-ray department.



An endoscope is passed through the mouth, down into your stomach and the upper part of the small intestine (the duodenum).

Photographs may be taken to assist the medical team in your treatment. If you have any objections please highlight this to the endoscopist or nurse prior to the procedure. You can be assured that all patient information is strictly confidential in accordance with the Data Protections Act 1998.

## **The preparation**

To allow a clear view the stomach and the duodenum must be empty. Therefore you must not have anything to eat or drink for at least six hours before the test.

The endoscope is a long flexible tube with a bright light at one end, which allows the doctor to see his way to the duodenum where he can look at the outlet from your gallbladder and pancreas. To see if there is a problem in your bile duct or pancreatic duct a fine plastic tube is passed down a channel in the endoscope and X-ray dye is injected into the ducts then this shows up on the X-ray screen.

If everything is normal, the test is complete and the endoscope is removed.

If there is a gallstone in the duct from your gallbladder, the doctor will enlarge the opening of the bile duct by making a small cut (sphincterotomy). If you have any metal work or other prosthesis on your body please inform the nurse on admission. This is done with an electrically heated wire (diathermy). This is painless and enables the doctor to remove the stones or let them pass into the intestine to be passed in your motion.

If there is a narrowing in the duct a small plastic or metal tube (stent) will be placed inside the narrowing to allow the bile to drain. Any jaundice or itching that you may have suffered should be relieved. Occasionally the plastic tube can become blocked and it may be necessary to replace it from time to time.

## **What are the benefits?**

To assist in diagnosis and provide any necessary treatment.

## **Are there significant risks?**

ERCP has become popular because it can provide a diagnosis and treatment more safely and easier than other options such as surgery. ERCP is not without risk, however, it is only carried out when the doctors have carefully balanced the risks of doing the test compared with doing any other test/operation or the risk of doing nothing. Your doctor will be happy to discuss this with you further.

Taking X-rays involves a small dose of radiation no greater than other standard X-ray tests. You could have an allergic reaction to equipment materials, medication or dye. This usually causes a skin rash which settles with time. Sometimes the reaction can be serious (risk: 1 in 2500) or even life threatening (risk: 1 in 25000).

Specific complications of ERCP occur in 5-10% of patients. The precise risk depends on the particular patient, disease, and type of ERCP procedure. Make sure you understand the likely risks in your particular case.

Pancreatitis (swelling and inflammation of the pancreas) is the most common complication of ERCP; it occurs in 2-4% of ERCPs. It can occur even in the most expert hands. Pancreatitis usually resolves in one to three days, but you will need to be in the hospital with IV fluids and analgesics (pain medicines). More serious cases of pancreatitis occur in less than 1% of ERCP procedures. Severe pancreatic damage can result in formation of a pseudocyst or abscess, which may require a prolonged stay in the hospital. Rare fatal cases of pancreatitis related to ERCP have been reported.

You may be given a Diclofenac suppository, either before or after the procedure to help prevent pancreatitis, unless contra indicated.

Other important complications are less common, and occur mainly after treatments such as sphincterotomy. This may provoke bleeding (risk: 3 in 100), which can usually be controlled by the doctor during the ERCP. Rarely is it necessary to give a blood transfusion or other treatment such as surgery.

Sphincterotomy can also result in perforation (risk: 1 in 200) when the cut extends into the tissues behind the duodenum and pancreas. Some perforations can be treated medically (with IV fluids, antibiotics, and a nasogastric tube); other cases may require surgery and prolonged hospital treatment.

Very rarely, the endoscope itself can perforate (make a hole) in the lining of the oesophagus, stomach or duodenum. This type of perforation usually requires surgical treatment.

Infection can occur in the bile ducts (cholangitis) (risk less than: 1 in 100) or pancreas after ERCP, especially when there is duct obstruction which cannot be treated by the ERCP procedure. Antibiotics will be required, and possibly another type of drainage procedure such as surgery.

Adverse reactions to the medication used to sedate you are possible, including irritation in the vein at the site of injection.

Other rare complications include aspiration pneumonia and a slight risk of damage to crowned teeth / dental bridge work. Some of the risks can be serious and can even cause death (risk: 4 in 1000).

## Alternatives

MRCP (Magnetic Resonance Cholangiopancreatography) is an investigation designed to give an overview of the liver, pancreas and biliary tree. This procedure does not allow for any treatment to be undertaken.

The alternative procedures to deliver the same type of treatment, that may be carried out during an ERCP, are an operation or the bile duct may be approached through the liver and skin. Both approaches have higher risks of complications.

This leaflet has been prepared to help answer questions you may have, but if you are worried, please do not hesitate to ask the staff any questions when you attend

If you are a diabetic and you have any queries regarding your medication please ring the unit for advice.

If you are taking warfarin you will be referred to the haematology clinic for a blood test.

### **IF YOU HAVE NOT DISCUSSED STOPPING THE FOLLOWING MEDICATIONS WITH YOUR CONSULTANT IN CLINIC PLEASE RING THE ENDOSCOPY UNIT IMMEDIATELY:**

- Ticagrelor, Prasugrel, Dipyridamole and Clopidogrel
- Warfarin
- Apixaban, Rivaroxaban, Dabigatran and Edoxaban
- Any other blood thinning medication

Aspirin does not need to be stopped for the procedure.

This is to reduce the risk of bleeding during and after the test.

Some patients receive a request form to have blood taken either at their GP practice or to attend the out-patient department four days prior to the procedure.

Other patients who are having propofol sedation will be asked to attend the hospital to be pre-assessed a few days prior to procedure.

If you have any loose teeth please attend the dentist for treatment prior to this procedure, failure to do this may result in your procedure being postponed. Please inform the nurse if you have any bad allergies or bad reactions to drugs / contrast. We are particularly interested in allergies to shellfish or iodine.

## **What should you expect?**

### **Admission**

You may already be an inpatient on the day of your test or you may be admitted to hospital on the day. If you are admitted on the day of the test, you will be given instruction to report to the endoscopy / day case unit.

When you arrive a nurse will introduce herself and answer any questions you may have.

Please inform us if you have had any surgery on your abdomen, a pacemaker fitted / or any metals in your body.

For this procedure you will be expected to change into a hospital gown. Please bring your dressing gown and slippers. You will be shown to a changing room and will be asked to sit in a waiting area.

Please do not bring any valuables to the hospital and please remove jewellery. Also, please remember that your appointment time is not the time you will have your test. There will be a waiting time between your admission and having your test done.

### **Sedation**

A small needle will be placed in the back of your hand and the sedation and other drugs will be injected through it, as required.

This is conscious sedation. This might make you feel sleepy and relaxed. We aim to keep you as comfortable as possible during the procedure; it is NOT a general anaesthetic

The effects of sedation persist for up to 24 hours.

### **During the Procedure**

A nurse will stay with you during the procedure. A radiographer will also be in the room and she will be asking you a few routine questions.

In the procedure room you will be asked to remove any dentures and a local anaesthetic spray may be applied to numb the back of the throat.

You will be made as comfortable as possible lying flat on the table on your stomach. Your pulse rate and oxygen levels will be monitored during the test by placing a probe on your finger.

A small nasal sponge will be placed in your nostrils to give you a little oxygen to breathe during the test. To keep your mouth slightly open a plastic mouthpiece will be placed gently between your teeth or gums. Once this has been completed you will be given some sedation to relax you.

When the doctor passes the endoscope into your mouth it will not cause you any pain, nor will it interfere with your breathing at any time. During the test some air will be passed down the endoscope to distend the stomach and duodenum to allow the doctor a clear view. You may feel "wind like" discomfort and belch some air up during the procedure. The air is sucked out at the end of the test so that you are left feeling comfortable.

If you get a lot of saliva in the mouth, the nurse will clear this for you using a small suction tube. When the examination is finished the endoscope is removed quickly and easily.

The ERCP can take between 20 to 30 minutes or more depending on what has to be done.

## **After the Procedure**

A nurse will take you to recovery area on the trolley and another nurse will take over your care. Your blood pressure, pulse and oxygen levels will be monitored at regular intervals for the first 2 hours whilst you are on the trolley and resting. You may be given intravenous (IV) fluids to help hydrate you whilst in recovery. You will be offered refreshments after the 2 hours and allowed a drink once you have fully recovered from the sedation this may be longer as instructed by the doctor.

Then you will be moved to a seated recovery area where you will be monitored hourly for the next 4 hours, you will be staying on the unit for around 6 hours after the procedure then discharged home. If for any reason there are any complications, you may be transferred to a ward for further assessment and may need to stay in hospital.

You may get a sore throat for the rest of the day and feel bloated and a sickly feeling if any air remains in the stomach. Both these discomforts will pass.

You will see the doctor or a nurse after the ERCP who will tell you the results of the test. You will be informed by the nurse if you have a small plastic stent put in your pancreatic duct and you will have an X-ray arranged for around 1 week after the procedure. This is to ensure that the stent has fallen out, do not worry as this is what the stent is designed to do and you will just pass it normally through your stools. If it has not dropped out then you will be requested to come for a gastroscopy to have the stent removed.

A report of the ERCP will be sent to your GP and the doctor who referred you for the test.

## **Going Home**

The sedation lasts for longer than you think. You must have a responsible adult with you for 12 hours after sedation.

For twenty-four hours following the sedation you should not:

- Drive a car
- Drink alcohol
- Operate machinery
- Sign any legally binding documents

If you have any severe discomfort once you have returned home and that is not settling, you must return to Royal Blackburn Emergency Department and tell them you have been for an ERCP and explain the symptoms you are having.

## **Contact Number**

If you have any questions regarding the test please ring  
Royal Blackburn Teaching Hospital

01254 733191.









If you require this **document** in an alternative format or language, please contact 01282 803541

### Polish

W celu otrzymania tego **dokumentu** w innym formacie lub języku, prosimy o kontakt z

### Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਨੂੰ ਕਿਸੇ ਵਿਕਲਪਿਕ ਫਾਰਮੈਟ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੋੜੀਂਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸੰਪਰਕ ਕਰੋ

### Urdu

اگر آپ کو اس دستاویز کی ایک متبادل شکل (فارمیٹ) یا زبان میں ضرورت ہے تو براہ مہربانی رابطہ کریں

### Bengali

আপনি যদি এই **প্রচারপত্রটি** অন্য কোন আকারে বা অন্য ভাষায় চান, তাহলে যোগাযোগ করবেন

### Romanian

Dacă aveți nevoie de acest document într-un format sau limbă alternativă, vă rugăm să contactați

### Lithuanian

Norint gauti šį **dokumentą** kitu formatu ar kita kalba, prašome susisiekti su mumis

The Customer Relations Team can be contacted by patients, carers and their families who require help with problems or have concerns about services provided by East Lancashire Hospitals NHS Trust. Please telephone: 0800 587 2586 – there is a facility to leave a message on this number.

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<https://www.elht.nhs.uk/services/endoscopy>



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