Endoscopic Retrograde Cholangio-pancreatography (ERCP)

This booklet contains details of your appointment, information about the examination and the consent form.

Please bring this booklet with you to your appointment.
Your appointment

An appointment for your ERCP (examination of your bile duct and pancreas) has been arranged at the Day Case Unit, on Level 5 (outside Ward 5F) of the John Radcliffe Hospital.

Please telephone the Day Case Unit between 9.00am and 4.00pm, Monday to Friday, on 01865 221 171 or 01865 220 081, if this appointment time is not convenient for you or if you are unable to keep your appointment. This will enable staff to arrange another date and time for you and to give your appointment to someone else.

If you need travel information please refer to the Trust website at www.ouh.nhs.uk or telephone the Unit and we will send you an information leaflet.

Introduction

You have been advised by your hospital doctor to have an ERCP. This is an examination of the bile duct and/or pancreas. We will need to have your formal consent before we can carry out this examination. This booklet explains how the examination is carried out and what the risks are. This will help you to make an informed decision when agreeing to the examination. The consent form is at the front of the booklet.

If there is anything you do not understand, or anything you wish to discuss further, but still wish to come for the appointment, do not sign the consent form. Instead, bring it with you and you can sign it after you have spoken to the endoscopist.

The consent form is a legal document – please read it carefully. Once you have read and understood all the information, including the risk of complications, and you agree to undergo the examination, please sign and date the consent form. You will notice that the consent form is carbonised, allowing you to keep a copy for your records. Please remember to bring the consent form to your appointment.
What is an ERCP?

The examination you will be having is called an ERCP (Endoscopic Retrograde Cholangio Pancreatography). This is an examination of the bile duct, which drains bile from your gallbladder into your small bowel (duodenum). Sometimes the pancreatic duct, which drains digestive juices from the pancreas into the small bowel, is also examined. The examination is carried out by a or under the supervision of a specially trained doctor called an endoscopist.

![Diagram of digestive system and endoscopy](image)

The endoscopist will use an instrument called a duodenoscope, which is a flexible tube about the same thickness as your finger. The duodenoscope has a light on the end, which can be shone onto the lining of your bowel. It also has a very small camera which sends a live image to a screen, where it is viewed by the endoscopist.

The procedure isn’t painful, but to help you to relax you will be given sedation medication, which will make you feel sleepy.

During the ERCP the endoscopist will also use X-rays and a special dye to show up your bile ducts on the screen.
Why do I need an ERCP?

An ERCP may be recommended for a number of reasons, including to:

• help your doctors to make a diagnosis
• treat jaundice caused by gall stones or a narrowing of the bile ducts
• remove stones from the bile ducts or pancreatic duct
• insert a plastic or metal tube to drain the bile (or the pancreatic juices)
• clear blockage of the bile flow.

What are the risks and complications?

You may experience abdominal discomfort and/or a sore throat for a few days. This can be relieved by taking painkillers, such as paracetamol.

Problems which can occur are:

• Acute pancreatitis
  This is an inflammation of the pancreas which can cause abdominal pain that often extends into the back – it affects about 1 in 20 people. People with certain conditions, such as Sphincter Oddi Dysfunction, are at a slightly higher risk, with 1 in 5 people being affected. Acute pancreatitis can be a severe complication which may mean you need to stay in hospital for several days, sometimes longer.

• Bleeding
  This can occur in 1 in 500 people, but is 10 times more likely (10 in 500) if a cut has been made (sphincterotomy) to remove stones or to insert a stent. Bleeding can cause vomiting of blood which may be black, or the passing of black stools. The bleeding can often be stopped using special instruments that are passed through the duodenoscope. Very rarely, a blood transfusion or surgery is needed.

• Perforation
  A tear in the gastrointestinal wall or bile system occurs very rarely (1 in 1,000 people), which might require surgery to be repaired.

Vary rarely the above complications can become life-threatening.
Other risks

- Small abnormalities may be missed, although this is unlikely.
- Adverse reaction to the sedation medication or the X-ray dye.
- Short term problems with breathing, heart rate and blood pressure (related to sedation). We will monitor you carefully, so that if any problems do occur they can be treated quickly. Older people and those with significant health problems (for example, people with serious breathing difficulties), may be at higher risk.
- Heart attack or stroke (related to sedation) – though this is very unlikely.
- Damage caused by the duodenoscope to teeth or bridgework – this is very rare.

If you have any problems after ERCP which you feel may be related to the test, please inform your doctor or nurse immediately. Please feel free to discuss possible complications or risks with hospital staff before your ERCP.

What are the alternatives?

Computed tomography (CT) and magnetic resonance imaging (MRI) scans can also provide pictures of internal organs and the gastrointestinal wall, but no treatment can be given during these scans.

ERCP is a safe procedure and complications are uncommon, which is why it is used instead of surgery, where the risks are greater.

Sedation

The sedative medication will be injected into a vein in your hand or arm. It will make you drowsy and relaxed, but will not put you to sleep. You may be aware of what is going on around you and will be able to follow simple instructions during the examination. We will monitor your breathing and heart rate during the examination and you will be able to breathe quite normally.

After you have sedation you will not be allowed to
drive home. You must arrange for a family member or friend to collect you. You should also not go home on public transport after this procedure. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home.

The nurse will need to be given the telephone number so of the person collecting you that we can contact them when you are ready to go home.

Preparation

Eating and drinking
You must not eat anything for at least six hours before your ERCP. This is because food can stop the endoscopist getting a clear view of the inside of your stomach and small bowel. It also increases the risk of inhaling (breathing in) the contents of your stomach into your lungs, which can cause severe pneumonia. You can have sips of water up to two hours before your ERCP. If you do eat or drink something after these times, your test will be cancelled.

What do I need to bring with me?
Please bring in a dressing gown and overnight bag, in case you need to stay overnight in hospital.

Please leave all valuables at home. The hospital cannot accept responsibility for these items.

What about my medicines?
You should continue to take your regular medicines. Please bring with you a list of any medicines you are taking, including over the counter medicines and herbal remedies.

Patients with diabetes
If you have diabetes controlled by insulin or tablets please make sure that you tell us, so that we can give you an appointment at the beginning of the morning or afternoon. Please also telephone the Endoscopy Unit on 01865 221 456 at least one week before your endoscopy appointment, for advice about your diabetic medicines.
Anticoagulants
Please telephone the Endoscopy Unit on 01865 221 456 at least two weeks before your endoscopy appointment if you are taking anticoagulants, e.g. warfarin, clopidogrel, dabigatran, rivaroxiban or apixaban.

What happens when I arrive at the day case unit?

Soon after you arrive you will be seen by a nurse, who will ask you a few questions about your medical condition and any past surgery or illness you have had. This is to confirm that you are fit enough to undergo the ERCP examination. If you have not had a blood test in the previous five days, we will take a blood sample. The nurse will record your heart rate, blood pressure and oxygen levels. If you are diabetic, your blood glucose level will also be recorded.

The nurse will also check that you understand the examination and you will be able to ask any further questions or raise any concerns you may have. The nurse will ask you for your signed consent form. If you have not already signed the consent form, the doctor will be able to answer any questions you still have or talk to you about any concerns before the examination.

The nurse will also ask you about your arrangements for getting home after your ERCP. As you will be having a sedation you must have someone with you when you travel home.

You will be asked to remove your clothes and to put on a hospital gown. You will need to remove all jewellery and metal (such as piercings), as this can interfere with X-rays and a special instrument called a diathermy, which may be used during the ERCP.

An intravenous cannula (small plastic tube) will be placed in your right arm, so that we can give you the sedative medication during the procedure.

You may be given an anti-inflammatory pessary into your rectum (bottom) before the ERCP, to reduce the risk of developing pancreatitis (inflammation of the pancreas).
What happens during the ERCP examination?

When the procedure is ready to start, you will be moved to the examination room in the radiology department. The endoscopist and the nurses will introduce themselves and you will have the opportunity to ask any final questions. A qualified endoscopist or a trainee endoscopist under direct supervision will perform your examination. A nurse will also remain with you throughout the procedure.

We will give you a small plastic mouth guard to put between your teeth, to protect them during the examination. (If you have any dentures you will be asked to remove them first.) The nurse will then ask you to lie on the X-ray table and will place a probe on your finger to monitor your oxygen levels.

The sedative medication will be injected into the cannula and you will quickly become sleepy. A small plastic suction tube, rather like the one used at the dentist, will be used to remove any saliva or other secretions produced from your mouth during the examination.

The endoscopist will put the duodenoscope into your mouth and will pass it gently down your oesophagus into your stomach, then into your duodenum (upper part of the small bowel). You will be able to breathe normally through your nose. The duodenoscope allows the doctor to see pictures of the inside of your intestine on a screen. A small amount of air will be blown into your stomach, to help the endoscopist to see clearly. This may be uncomfortable but shouldn’t cause any pain.

The doctor will find the position of the valve where the pancreatic and bile ducts enter the duodenum. A very thin plastic tube will then be inserted down the duodenoscope into the bile or pancreatic duct, to inject a special dye, so that the pancreatic and bile ducts can be seen on X-ray films. The dye is later passed out of your body harmlessly.

The doctor will then carry out any treatments that are required.

If the X-rays show that you have gall stones in the bile ducts, the
doctor may treat these by cutting the opening of your bile duct (sphincterotomy) using an electrically heated wire (diathermy) that is passed down the duodenoscope. You will not feel anything when this is carried out. The doctor will then remove the gall stones using a special balloon or ‘basket’.

If there is a narrowing (stricture) of the bile duct, a short plastic or metal tube called a stent will be placed across the narrowing to drain the bile. You will not be able to feel the tube, which may remain in place permanently. There is a chance that the stent may become blocked after a few months. If this happens, it may be necessary to replace the stent by performing another ERCP.

X-ray films and/or photographs may be taken for your health record and documentation purposes. A biopsy (sample of tissue) or some bile may be collected and sent to the laboratory to be analysed. The tissue sample and associated clinical information will be kept and may be used for teaching purposes and for research aimed at improving diagnosis and treatment of upper GI tract disorders. This may benefit other patients in the future. If you do not wish us to keep the tissue samples for this purpose or have any questions or concerns, please ask the endoscopist before signing the consent form. Images from the ERCP and X-ray will be kept in your health record.

How long will I be in the hospital?

The procedure usually takes between 30 minutes and 1 hour. However, you should expect to be in the department for most of the day. The Unit also deals with emergencies and these will take priority over people with outpatient appointments, but we will try to keep any delays to an absolute minimum. Depending on your health condition or whether you have a treatment or procedure during the ERCP, you might be admitted overnight.
After the examination

You will be taken back to the Day Case Unit, where a nurse will monitor your blood pressure, heart rate and breathing, whilst you recover from the sedation. If you are diabetic, your blood sugar level will also be monitored. You might experience a sore throat and bloating if there is still some air in your stomach. Both of these are normal and will gradually get better.

You may be given fluids through a drip into the cannula, until you have recovered enough to eat and drink again.

The doctor will decide whether to discharge you home or admit you to a ward overnight. The doctor or nurse will explain the results of the ERCP and what treatment has been given or is planned. Sedation can make you forgetful, so it is a good idea to have a member of your family or a friend with you when you are given the results of your examination.

A copy of the ERCP report will be sent to your GP and we will also give you a copy to take home.

Going home

If you are having an ERCP without any additional treatment it is likely that you will be allowed home after the test, but you must have a relative or friend to accompany you home and stay with you overnight, in case you are unwell. Once you are back at home, it is important to rest quietly for the remainder of the day and have only small light meals.

Sedation can cause you to be forgetful, even though you might think you are fine. For 24 hours after the sedation, you should not:

- drive a car
- operate machinery
- drink alcohol
- sign any legal documents
- be left alone to care for children.

The effects of the test and sedation should have worn off by the next day, and you should be able to go back to your normal activities. Most people feel perfectly back to normal after 24 hours. If you still feel drowsy, you should wait a further 24 hours before driving.
If you are unable to keep your appointment please help us by notifying the Endoscopy Unit as soon as possible. Your appointment slot can then be given to someone else, and you will be offered an alternative date and time.

If you have any problems with on-going abdominal pain, a high temperature above 37.5°C, or bleeding during the next 48 hours after your ERCP, please contact the John Radcliffe Hospital:

Tel: **0300 304 7777**
Ask the switchboard to bleep Urgent Endoscopy Advice on 6825.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

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