

Endoscopic Retrograde Cholangio- Pancreatography (ERCP)

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Procedure Information

Please read this leaflet as soon as possible and well in advance of your appointment. If you do not follow the advice on how to prepare for your procedure it may not be possible to do it and you may have to return on another day.

Please bring this leaflet and consent form with you when you attend for your appointment

Helpline or enquiries (8.30am to 5.00pm Monday to Friday)

For appointments and general enquiries

Boston 01205 445072

Lincoln 01522 573849

For procedure related enquiries (8.30am to 6.00pm Monday to Friday)

Boston 01205 446559

Lincoln 01522 573016 01522 512512 ext 458669

For more information please see: www.ulh.nhs.uk/sevices/endoscopy

Aim of the leaflet

The aim of this leaflet is to help you make a choice about having an ERCP. It describes how an ERCP is carried out and explains the benefits and risks.

It is important that you follow the instructions about stopping food and drink before the test. This is for your safety. If you do not follow the advice given it may not be possible to do your procedure and you may have to return on another day.

Introduction

You have been advised to have an investigation known as Endoscopic Retrograde Cholangio-Pancreatography (ERCP).

If you are unable to keep your appointment, please notify the department as soon as possible as your appointment may be used for someone else. The booking team will arrange another date and time for you. Please bring this booklet with you when you attend.

Enclosed with this booklet is a consent form. **Your signature is needed for the test to go ahead.**

The consent form is an important document. Please read it carefully together with the information in this booklet. Please bring both the consent form and booklet with you to your appointment.

We may contact you a few days before your appointment to discuss the procedure in more detail. You will also be given the opportunity to ask questions in the department when you attend for your appointment.

In case of any problems please contact the relevant endoscopy unit.

What is an ERCP?

The procedure you will be having is called Endoscopic Retrograde Cholangio-Pancreatography, sometimes known more simply as an ERCP. Cholangio-pancreatography means x-ray pictures of the bile and pancreatic ducts (tubes). A duodenoscope is a thin, flexible telescope which is passed through the mouth into the oesophagus and down towards the stomach and duodenum. The duodenoscope contains tiny fibre optic channels, which allow light to shine down and a camera so the doctor can see inside.

The duodenoscope also has a 'side channel' down which various tubes or instruments can pass. These can be manipulated by the doctor who can do various things. For example:

- Inject a contrast dye into the bile and pancreatic ducts. X-ray pictures taken immediately after the injection of dye show the ducts in detail. This may show narrowing (stricture), gallstones, or a tumour pressing on the duct, etc.
- Take a small sample (biopsy) from the lining of the duodenum, stomach, or ampulla. The biopsy sample can be looked at under the microscope to check for abnormal tissue and cells.
- If the x-rays show a gallstone stuck in the duct, the doctor can widen the opening of the papilla to let the stone out into the duodenum. This is called a sphincterotomy. The stone may be removed from the duct by a balloon and/or basket and left to be passed out with the faeces (bowel motions).
- If the x-rays show a narrowing or blockage in the bile duct, the doctor can put a stent inside to open it wide. A stent is a small wire-mesh or plastic tube. This then allows bile to drain into the duodenum in the normal way. You will not be aware of the stent which can remain permanently in place.

The duodenoscope is gently pulled out when the procedure is finished. An ERCP can take anything from 30 minutes to over an hour, depending on what is done.

During the investigation, the doctor may need to take some tissue samples (biopsies) from the lining of your upper digestive tract for analysis. This may be a little uncomfortable. The samples will be retained. Photographs and x-rays may be taken and kept with your clinical records and may be used for teaching purposes.

The procedure will be performed by a Consultant. We will endeavour to make the investigation as comfortable as possible for you. Your throat will be numbed by a local anaesthetic spray and you will receive an injection of sedative (conscious sedation) for this procedure.

Why do I need to have an ERCP?

You have been advised to undergo this investigation to try and find the cause for your symptoms, help with treatment and if necessary, to decide on further investigations.

There are many reasons for this investigation including: jaundice, gall stones, abdominal pain and an abnormal ultrasound, CT or MRI scan.

CT and MRI scans are alternative investigations. Unfortunately these are not as informative as an ERCP and have the added disadvantage that tissue samples cannot be taken nor treatments given.

Risks of the procedure

ERCP is classified as an invasive investigation and because of that it has the possibility of complications. These do not occur very often. We would wish to draw your attention to them and so with this information you can make your decision. The doctor who has requested the test will have considered this. The risks must be compared to the benefit of having the procedure carried out.

The risks can be associated with the procedure itself and/or with the administration of the conscious sedation.

ERCP

The main risks are of discomfort, abnormal heart rhythm, chest infection, mechanical damage to teeth or bridgework, perforation (tear) of the gut lining, inflammation of the pancreas (pancreatitis) (2 in 100 cases), bleeding requiring a blood transfusion in (1 in 100) and failure of the planned treatment (1 in 20). Any of these could mean you being admitted to hospital for treatment with antibiotics and intravenous fluids. Deaths occur rarely, in 1 in 1000 procedures.

Perforation may occasionally require surgery to repair the hole. Bleeding may occur at the site of any treatment, but nearly always stops on its own.

Conscious sedation

Sedation can occasionally cause problems with breathing, heart rate and blood pressure. If any of these problems do occur, they are normally short lived. Careful monitoring by a fully trained endoscopy nurse ensures that any potential problems can be identified and treated rapidly.

Older patients and those who have significant health problems, for example, people with significant breathing difficulties, may be assessed by a doctor before having the procedure.

Preparation for the procedure

Eating and drinking

For your safety, to reduce the risk of complications, and give clear views, your stomach must be empty. **Do not have anything to eat for at least 6 hours before the test and only have a light meal before this time. Small amounts of water are allowed up to 2 hours before your appointment time. Other fluids such as milk are NOT allowed (even in tea and coffee) as they coat the stomach.** You should have nothing to drink for at least 2 hours before the test. If you do not follow this advice, your procedure will be rearranged.

Diabetes

If you have diabetes controlled on insulin or tablets please ensure your doctor and the Endoscopy Booking Team are aware so that the appointment can be made towards the beginning of the list. There is further advice later in this leaflet.

Blood thinning medications (anticoagulants)

Please telephone your consultant's secretary (ask switchboard to be put through) if you are taking anticoagulants such as **warfarin, dabigatran, apixaban, rivaroxaban, edoxaban and also clopidogrel (Plavix), ticagrelor, prasugrel and dipyridamole.**

What about my other medication?

Your routine medication should be taken as usual.

Pacemakers and ICDs

Please tell the doctor and nurses if you have a pacemaker or implanted cardiac defibrillator device.

How long will I be in the department?

This largely depends on how quickly you recover from any sedation and how busy

the department is. You should expect to be in the department for up to 4 hours but this may be longer depending on your recovery.

Throat spray and conscious sedation

Local anaesthetic throat spray and intravenous conscious sedation can improve your comfort during the procedure so that the endoscopist can perform the procedure successfully.

Anaesthetic throat spray

The throat is numbed with a local anaesthetic spray. The spray has an effect very much like a dental injection.

You must not have anything to eat or drink for about an hour after the procedure, until the sensation in your mouth and throat has returned to normal.

Intravenous conscious sedation

The sedation medicines will be administered into a vein in your hand or arm which may make you slightly drowsy and relaxed but not unconscious. You will be in a state called conscious sedation; this means that, although drowsy, you will still hear what is said to you and therefore will be able to follow simple instructions during the investigation. Sedation also makes it less likely that you will remember anything about the procedure. You will be able to breathe quite normally throughout.

Whilst you are sedated we will check your breathing and heart rate so changes will be noted and dealt with accordingly. For this reason you will be connected by a finger probe to a pulse oximeter which measures your oxygen levels and heart rate during the procedure. Your blood pressure may also be recorded.

Please note if you have sedation into the vein, you will need someone to accompany you home and stay for at least 4 hours and if possible overnight.

You are not allowed to take part in the following activities for 24 hours afterwards:

- **drive a vehicle**
- **go to work**
- **look after children on your own**
- **operate heavy/dangerous machinery**
- **drink alcohol**
- **sign legally binding documents**

What happens when I arrive?

When you arrive for your appointment please book in at reception. It is our aim for you to be seen as soon as possible after your arrival. However, if the department is very busy your appointment may be delayed. The department looks after emergency patients who will be seen first if needed.

A nurse will take you through to the admission room and ask you about your general health to check if you are fit to have the procedure. You will also be asked about your plans for getting home afterwards.

You will be offered conscious sedation with a local anaesthetic throat spray (this is dealt with in more detail in the next section of this booklet).

If you have sedation for the procedure you will not be able to drive afterwards and it is advisable not to use public transport (further important information about sedation is given on page 10 of this booklet). It is essential that you arrange for someone to collect you. Please give the nurse their telephone number so that we can ring them when you are ready to go home.

Your blood pressure, heart rate and oxygen levels will be recorded and if you are diabetic your blood glucose level will also be recorded.

The nurse or doctor will ensure you understand the procedure and discuss any outstanding concerns or questions you may have. If you are happy to go ahead, you will be asked to sign your consent form.

A cannula (small plastic tube) will be inserted into a vein so that medication can be given during the procedure.

The ERCP examination

You will be taken into the procedure room where the endoscopist and the nurses will introduce themselves and you will have the opportunity to ask any final questions.

If you have any dentures or glasses you will be asked to remove them at this point. Any remaining teeth will be protected by a small plastic mouth guard which will be inserted immediately before the examination commences.

If you are having local anaesthetic throat spray this will be sprayed onto the back of your throat. The effect is rapid and you will notice a loss of sensation to your tongue and throat.

The nurse looking after you will ask you to lie on your left side and will then place the oxygen monitoring probe on your finger. The sedation will be administered via the cannula (tube) in your vein and you will quickly become relaxed. In some circumstances you will also receive an antibiotic. In addition, we may need to give you an anti-inflammatory medicine given as a suppository into the rectum (back passage) at the end of the procedure. This reduces the risk of complications following the ERCP.

Any saliva or other secretions produced during the investigation will be removed using a small suction tube, again rather like the one used at the dentist.

The endoscopist will introduce the duodenoscope into your mouth, down your oesophagus into your stomach and then into your duodenum. Your wind pipe is deliberately avoided and your breathing will not be affected.

During the procedure, samples may be taken for analysis in our laboratories. These will be retained and it may take up to 2 weeks to be processed. Any photographs will be recorded in your notes.

What will happen after the procedure?

You will be allowed to rest as long as is necessary. Your blood pressure and heart rate will be recorded and if you are diabetic, your blood glucose will be monitored. Should you have any underlying breathing difficulties or if your oxygen levels were low during the procedure, we will continue to monitor your breathing. Once you have recovered from the initial effects of the sedation, you will be sat up and made comfortable.

Before you leave the department, the nurse or endoscopist will discuss with you the findings and any medication or further investigations required. They will also inform you if you require further appointments.

Since conscious sedation can make you forgetful it is a good idea to have a member of your family or a friend with you when you are given this information. You will be given a copy of the procedure report and a copy will be sent to your GP.

The nursing staff will contact the person collecting you when you are ready to go home.

You may have a sore throat from the insertion of the tube which can last up to 48 hours. This will wear off but simple lozenges will help. You may also feel bloated if

some of the air has remained in your stomach. To help this, sit upright and if possible walk around.

Pain relieving tablets, such as paracetamol, may be taken at home according to the manufacturer's instructions.

If you have not had sedation you may feel able to return to work after the procedure depending on the sort of work you do. However, many people need time to rest for a few hours afterwards. By the following day most people feel able to resume normal activity. If you have been given sedation you are advised not return to work for 24 hours afterwards.

Guidelines for people with diabetes undergoing ERCP

Treatment by diet alone

If you control your diabetes with diet alone, you simply need to follow the earlier instructions about fasting and drinking.

Treatment by tablets and/or insulin

You should inform the endoscopy booking team about your diabetes and request an early morning appointment.

Adjusting your diabetes medication to prevent hypoglycaemia

You will need to adjust your treatment the evening before and the morning of the procedure to reduce the risk of hypoglycaemia (low blood sugar level). As a result your blood sugar level may be a little higher than usual. This is only temporary to maintain your blood sugars during the procedure and you should be back to your usual level of control within 24 to 48 hours. Please contact the Diabetes Nursing Team on 01522 573074 well in advance of the appointment, to discuss any concerns.

Carrying glucose to treat hypoglycaemia

On the day of the procedure, carry glucose tablets in case of hypoglycaemia. When sucked these are absorbed quickly through the tissues of the mouth and they will not interfere with the procedure.

If you have symptoms of low blood sugar, suck 4 to 6 tablets initially, followed by a further 4 to 6 if your blood sugar remains low after 10 minutes.

Blood glucose monitoring

If you usually test your blood sugar level, check it as usual, on the morning of the procedure and carry your equipment with you to the appointment. If you do not usually test your blood, do not worry, your blood levels will be checked when you arrive for the procedure.

Please report to the nursing staff if you have needed glucose before arriving for your appointment and tell them immediately if you feel 'hypo' at any time during your visit.

What must I remember?

- It is our aim for you to be seen and investigated as soon as possible after your arrival. However, the department is very busy and your investigation may be delayed. If emergencies occur, these patients will obviously be given priority over the less urgent cases
- If you are unable to keep your appointment please notify the endoscopy department as soon as possible. Telephone numbers are given at the beginning of this leaflet
- If you have any problems with a persistent sore throat, worsening chest or abdominal pain, please contact your GP or telephone 111, informing them that you have had an ERCP.
- If you are unable to contact 111 or speak to your doctor, you must go immediately to the hospital's accident and emergency department (A&E).
- As you have received sedation please arrange for someone to collect you and to stay overnight with you if possible.
- The hospital cannot accept any responsibility for the loss or damage to personal property during your time on these premises.

If you are worried about any symptoms you experience after this test, please do not hesitate to contact us on the helpline telephone numbers on page 2 of this leaflet. Out of hours please contact the NHS non-emergency service on 111.

United Lincolnshire Hospitals NHS Trust has worked with AccessAble to create detailed Access Guides to facilities, wards and departments at our sites.

www.accessable.co.uk/united-lincolnshire-hospitals-nhs-trust

United Lincolnshire Hospitals NHS Trust endeavours to ensure that the information given here is accurate and impartial.

If you require this information in another language, large print, audio (CD or tape) or braille, please email the Patient Information team at patient.information@ulh.nhs.uk