Having an Endoscopic Retrograde Cholangiopancreatography (ERCP) (page 1 of 7)

This leaflet is intended to provide answers to common questions that you may have about ERCP.

If you are having the procedure as a pre-planned operation, you should have plenty of time to discuss it with your consultant and the doctor doing the ERCP. If you need the procedure more urgently, there may be less time for discussion. However, before you sign the consent form you should still understand the explanation fully.

Please read this information carefully. If you have any questions you will be able to ask the doctor doing your ERCP or the nurse when you arrive in the Endoscopy Unit.

What is an ERCP?

Endoscopic retrograde cholangiography is a procedure in which a thin, flexible telescope, which is called an endoscope, is passed through the mouth and into the stomach and duodenum, in order to gain access to the bile and pancreatic ducts. The bile ducts drain bile from the liver and gall bladder into the duodenum. The pancreatic duct drains pancreatic juice from the pancreas into the duodenum. An ERCP enables us to diagnose conditions of the bile and pancreatic ducts and to treat those conditions. A thin plastic tube is passed up into the ducts from the duodenum and a colourless liquid, called contrast, which shows up on X-rays, is gently injected into the ducts so that they can be clearly seen. The procedure can be carried out under sedation or rarely under general anaesthetic.

Endoscopy Unit
01722 429385 or 429381
Is there an alternative to ERCP?

A special scan, called a magnetic resonance or MRI scan, can be used to image the bile and pancreatic ducts. However, unlike an ERCP, an MRI scan cannot perform treatment on the ducts and their contents. Sometimes an MRI scan is used to make the diagnosis before going on to perform an ERCP for treatment purposes.

What preparation is required?

If you are taking warfarin, apixaban, rivaroxaban, dabigatran or the cardiac drug clopidogrel, you must inform the Endoscopy Team as soon as possible. Please phone the endoscopy nurses for advice on 01722 425161.

You will also need to have a blood test to check your blood clotting time; this varies naturally from person to person. However, if we need to perform a sphincterotomy (a small cut in the bottom of the common bile duct) it is essential that your clotting time is normal.

You should have nothing to eat for six hours, and nothing to drink for two hours before the examination.

When you arrive on the unit you will be seen by a doctor who will explain the procedure to you and answer any questions, before you are asked to sign the consent form. You will be asked if you have any allergies.

You will be asked to undress on the ward, to take off all items of clothing except underpants and to put on a gown, which should be tied up at the back. Help can be given if you need it.

For safety reasons you will have to remove any false teeth, hearing aids, spectacles or contact lenses. This can be done just before the examination begins in the X-ray room.

The examination

When you arrive on the Endoscopy Unit, a nurse will meet you and check your personal details. The same nurse will look after you throughout the procedure. Your blood pressure, pulse and oxygen levels will be monitored and recorded throughout your stay on the Unit. You will have the opportunity to ask any questions about the procedure.

In the X-ray room you will be made comfortable on the X-ray table, resting on your left side. Endoscopy and X-ray equipment will be beside the couch. The room will need to be darkened so that the monitors can be clearly seen.

You will be given an injection to make you feel sleepy and relaxed, and although most patients have little or no memory of the examination being done, you will hear voices in the background during the examination. You will not be completely asleep.

Under certain circumstances you may be given a general anaesthetic for the procedure and this will be discussed with you first by your consultant. Very rarely the sedation may not be fully effective and you may need a general anaesthetic during the procedure.

- A fine soft tube will be placed into your nostrils to give you oxygen to breathe during the examination.

Endoscopy Unit
01722 429385 or 429381
Having an Endoscopic Retrograde Cholangio Pancreatography (ERCP) (3 of 7)

- To keep your mouth slightly open, so that the endoscope can move freely, a plastic mouthpiece will be gently placed between your teeth or gums.
- The staff will be wearing protective aprons because of their repeated exposure to X-rays (the risk to you is minimal).

When the endoscope is passed into your stomach it will not cause you any pain or interfere with your breathing.

X-ray contrast will be gently injected into your ducts via a small plastic tube that is passed down the endoscope.

If everything is normal, the endoscope is removed and the examination is over. The contrast passes out of your body when you pass water (urine). You will not notice it in your urine.

**Possible ERCP treatments**

If the examination shows gallstones or a blockage of the bile ducts, the doctor may be able to treat it straight away. This can be done in a number of ways:

**Sphincterotomy**

The muscular sphincter (valve) at the bottom of the bile duct is cut to enlarge the opening. This is done using an electrically heated wire (diathermy) which you will not feel.

**Stone removal**

The most common reason to perform a sphincterotomy is to remove bile duct stones. Small stones can pass spontaneously after a sphincterotomy. However, the doctor will usually remove them at the same time and leave them in your intestine to pass in your stool (motions/faeces).

Large stones may need to be crushed before being removed.

If the doctor is unable to remove the stones, a small plastic tube, called a stent, is left in the bile duct to make sure the bile can still drain. The stent stays in until the stone can be removed at a later procedure.

**Stenting**

A plastic or flexible metal stent is also used if a blockage has been found in the bile duct. The stent is placed through the blockage in the bile duct. This will help the bile to drain into the intestine in the normal way.

This will relieve the jaundice and itching that you may have. You will not be aware of the tube. It may be necessary to replace the stent some months later if it becomes blocked.

**What happens after your ERCP?**

You will stay in the recovery area of the unit until the recovery nurse is happy for you return to the ward or go home. Your pulse and blood pressure will be monitored regularly until you are wide-awake.

- if you remain pain free, after two hours, you can have a drink of water.

Endoscopy Unit
01722 429385 or 429381
• after 12 hours you may start to eat again if the doctor allows.

If you develop any complications, the ward staff will deal with them.

After the examination the doctor will visit you and discuss the result of the examination.

If you have recovered well with no complications you will be able to go home. If you are scheduled for a Thursday morning you will usually be able to go home in the afternoon after the doctor has seen you. If you are scheduled for a Monday afternoon you may need to stay in hospital for one night. In both cases you should bring an overnight bag with you.

The first day after the examination you may feel some soreness at the back of your throat. You might also feel a little bloated and full of 'wind'. This is because there is still air in your bowel from the procedure.

Complications and risks of ERCP

ERCP is performed because it can provide a safe and easy way of making a diagnosis and giving treatment. The risks and complications of the procedure are generally less than having an operation. It is important to be aware that occasionally ERCP may not be successful. ERCP is not without risk, and you should understand these risks.

• You may have an adverse reaction to the sedative used. Constant monitoring during the procedure will reduce this risk to a minimum.

• You may have an allergic reaction to the X-ray contrast or drugs being used. Signs of this can be itchy skin or a rash. This sort of reaction is rare and you will be asked about any known allergies you have before the procedure.

• Taking X-rays during the examination exposes you to a small dose of radiation but this is very small, will be monitored constantly and kept to a minimum.

Most complications increase your hospital stay by a day or two.

About 0.1% (1 in 1000) ERCP procedures result in a severe complication that may require a prolonged stay in hospital.

Death as a direct result of ERCP is extremely rare.

Specific complications of ERCP are:

Pancreatitis (inflammation of the pancreas)

The examination can lead to inflammation of the pancreas, but this is rare. It is important for you to tell the nursing staff on the ward if you have any pain, sweats or sickness following the examination. This is the most common complication and it occurs in 2% (2 out of 100) patients. It can be caused by bruising around the papilla and ducts, and the injection of X-ray contrast.

Pancreatitis occurs within a few hours after the ERCP. It is treated by giving you an intravenous drip, strong painkillers and antibiotics. You will not be allowed to eat and drink. Pancreatitis usually settles within 1 to 3 days although occasionally (less than 1% or 1 in 100 cases) it may be more severe.

Endoscopy Unit
01722 429385 or 429381
Bleeding (haemorrhage)
Can occur as a consequence of sphincterotomy. This is usually controlled during the examination. It rarely requires a blood transfusion or surgery to stop the bleeding. It occurs in 1% (1 in 100) patients.

Perforation
It is very rare for this to happen, but it can occur as a consequence of sphincterotomy. Most perforations are treated medically with fluids and antibiotics by a drip. More severe cases may require surgery.

Infection
Can occur in the gall bladder, bile ducts or pancreas after ERCP, especially when there is an obstruction within the duct that could not be treated during the ERCP. Infections are treated with antibiotics and occasionally by another drainage procedure.

Thank you for taking the time to read this. We hope it has helped you to understand your procedure. Please ask any questions. We will be very happy to help and reassure you.
# Pathway of care for your ERCP (Inpatients)

<table>
<thead>
<tr>
<th>Day before your ERCP</th>
<th>During</th>
<th>Next day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and drink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usual diet, unless advised otherwise by your medical team.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication and pain control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take your regular medication as usual unless you are taking insulin, warfarin, clopidogrel, apixaban, rivaroxaban or dabigatran.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You will need a blood test.</td>
<td>A small plastic tube, called a cannula, will be placed in the back of your right hand.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The procedure will be discussed with you.</td>
<td>You will be asked to sign a consent form.</td>
</tr>
<tr>
<td></td>
<td>You will be seen by a Doctor.</td>
<td>The Doctor doing your ERCP will confirm your consent.</td>
</tr>
<tr>
<td></td>
<td>You will be asked to sign a consent form.</td>
<td></td>
</tr>
</tbody>
</table>

**Endoscopy Unit**

01722 429385 or 429381

---

**Endoscopy Unit**

01722 429385 or 429381

---

**Having an Endoscopic Retrograde Cholangiopancreatography (ERCP)**

(Part 6 of 7)

- **Before**: No food for 6 hours, no fluids for 2 hours before the procedure.
- **During**: Through the cannula you will be given intravenous painkillers and something to make you sleepy.
- **After**: Fluids after 2 hours. Light diet after 12 hours if the doctors allow.

- **Before**: Take your medication according to the advice you have been given.
- **During**: Oxygen will be given through a small plastic tube placed in your nostrils.
- **After**: You may have your regular medication plus any painkillers you might need.

- **Before**: Take any inhalers to the Endoscopy unit with you.
- **During**: A plastic guard will be placed between your teeth.
- **After**: You will be given antibiotics.

- **Before**: Take your regular medication as usual unless you are taking insulin, warfarin, clopidogrel, apixaban, rivaroxaban or dabigatran.
- **During**: A nurse will check your details, with your notes, when you arrive in the unit.
- **After**: The Doctor doing your ERCP will come and talk to you. You will be told the result and any questions you might want to ask will be answered.
### Pathway of care for your ERCP (Outpatients)

<table>
<thead>
<tr>
<th>The day before your ERCP</th>
<th>Food and drink</th>
<th>Medication and pain control</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The day before your ERCP</td>
<td>Usual, unless advised otherwise by your medical team.</td>
<td>Take your regular medication as usual unless you are taking insulin, warfarin, clopidogrel, rivaroxaban or dabigatran. If you are taking these then you need advice from the nursing staff or phone 01722 336262 ext 2804.</td>
<td>You may have been asked to get a blood test at the hospital.</td>
</tr>
<tr>
<td>Day of your ERCP</td>
<td>No food for 6 hours before the procedure</td>
<td>Take any inhalers to the Endoscopy unit with you. You will be given antibiotics.</td>
<td>A nurse will check your details, with your notes, when you arrive in the unit. The doctor performing the ERCP will come and talk to you. You will be told the result and any questions you might want to ask will be answered.</td>
</tr>
<tr>
<td>Next day</td>
<td>Usual diet.</td>
<td>Take any regular medication as usual.</td>
<td>Oxygen will be given through a small plastic tube placed in your nostrils. A plastic guard will be placed between your teeth. Your oxygen level and pulse will be monitored closely during the ERCP.</td>
</tr>
<tr>
<td>After</td>
<td>Discharged home if doctors allow</td>
<td>You may have your regular medication plus any pain killers you might need.</td>
<td>On the unit, the nursing staff will monitor your blood pressure and pulse until you are wide awake. The doctor who performed your ERCP will come and talk to you. You will be told the result and any questions you might want to ask will be answered.</td>
</tr>
<tr>
<td>During</td>
<td>Fluids after 2 hours, Light diet after 12 hours if the doctors allow.</td>
<td>Through the cannula you will be given intravenous painkillers and something to make you sleepy.</td>
<td>Through the cannula you will be given intravenous painkillers and something to make you sleepy.</td>
</tr>
</tbody>
</table>

### Food and drink

- Usual, unless advised otherwise by your medical team.
- Before ERCP:
  - No food for 6 hours before the procedure.
  - No fluids for 2 hours before the procedure.

### Medication and pain control

- Take your regular medication as usual unless you are taking insulin, warfarin, clopidogrel, rivaroxaban or dabigatran. If you are taking these then you need advice from the nursing staff or phone 01722 336262 ext 2804.

### Procedure

- A nurse will check your details, with your notes, when you arrive in the unit. The doctor performing the ERCP will come and talk to you. You will be told the result and any questions you might want to ask will be answered.

#### Endoscopy Unit

01722 429385 or 429381