Endoscopy Department

Endoscopic Retrograde Cholangio Pancreatography (ERCP)

Important Information

Before your appointment
- If you take **Warfarin** please read Alert for patients on Warfarin on page 2 as you may need to have an INR test seven days before your procedure.
- If you have **diabetes** please read the advice on page 7 and 8.
- All other medication should be taken as normal.
- If you have any questions about the procedure or find you cannot keep this appointment please contact the Endoscopy Office between 09:00 and 17:00 Monday to Friday on 01223 257080.

On the day
- Have nothing to eat or drink for six hours before your appointment
- Please ensure you are accompanied. We cannot sedate you if you come to the department alone.

At the hospital
- Please come to the Endoscopy Department on level 3 of the Addenbrooke’s Treatment Centre (ATC).
- Use the ‘Patient and Visitor Treatment Centre Car Park’, opposite the main entrance of the ATC. Take your parking ticket and appointment letter to the ATC reception desk to obtain discounted parking.
- **Please note that the appointment time is for your pre procedure check, not the time of your examination.** The length of time you will be here will vary enormously but may be anything from two to four hours or more. Please ask your admitting nurse for further information during your admission check.
Alert for Endoscopy patients on Warfarin or Clopidogrel or other anticoagulant medication

You must read this guidance before your procedure.

If you have any questions or do not know whether to stop your medication before your Endoscopy please phone 01223 216515

<table>
<thead>
<tr>
<th>Warfarin: for patients advised to continue medication</th>
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<tr>
<td>• You should have an <strong>INR test seven days</strong> before the Endoscopy.</td>
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<tr>
<td>• If that <strong>INR result</strong> is <strong>3.0 or less</strong>, continue with your usual daily Warfarin dose.</td>
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<tr>
<td>• If that <strong>INR result</strong> is <strong>more than 3.0</strong>, ask your supervising anticoagulant service for advice to <strong>reduce your daily Warfarin dose</strong> so that your INR is 3.0 or less when you have the Endoscopy.</td>
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<table>
<thead>
<tr>
<th>Warfarin: for patients advised to stop medication</th>
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<tr>
<td>• You should <strong>stop Warfarin five days</strong> before the Endoscopy.</td>
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<tr>
<td>• After the Endoscopy go back to your usual daily dose as soon as you are eating again (that will usually be the same evening).</td>
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<tr>
<td>• You should have your INR checked one week later to ensure you are adequately anticoagulated again.</td>
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<td>If you have:</td>
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<tr>
<td>• metal mitral valve</td>
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<td>• metal valve + previous stroke/thrombosis</td>
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<td>• valvular heart disease</td>
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You may need Heparin injections instead of Warfarin. Ask your local anticoagulant service for advice.

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<tr>
<th>Clopidogrel: for patients advised to continue medication.</th>
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<tr>
<td>• Continue with your usual dose.</td>
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<tr>
<th>Clopidogrel: for patients advised to stop medication.</th>
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<tr>
<td>• You should stop <strong>Clopidogrel seven days</strong> before the Endoscopy.</td>
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<th>Other anticoagulant medication:</th>
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<tr>
<td>Acenocoumarol, sinthrome, phenindione, dindevan: If you are taking any of these please contact the Endoscopy department 01223 216515.</td>
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What is an ERCP?
Your doctor has requested this procedure to help investigate your medical condition to aid your diagnosis and management.
ERCP stands for 'endoscopic retrograde cholangio-pancreatography'. It is a procedure that allows the endoscopist to examine the tubes that drain bile from your liver and gall bladder and digestive juices from the pancreas.

Bile is made in the liver, which is in the upper right part of the abdomen. Bile passes from liver cells into tiny tubes called bile ducts; these join together like the branches of a tree. Bile constantly drips down the bile duct into the duodenum (the first part of the gut after the stomach). Bile helps to digest food, particularly fatty foods.

The gallbladder lies under the liver on the right side of the upper abdomen. It is like a pouch which comes off the bile duct. It is a 'reservoir' which stores bile between meals. It contracts (squeezes) when you eat, emptying stored bile back into the bile duct.

The pancreas is a large gland that makes enzymes (chemicals); these enzymes flow into the duodenum. The pancreatic enzymes are vital to digest food.

Jaundice, which is yellowing of the skin and urine, occurs when the tubes draining the bile become blocked. ERCP procedures are undertaken to relieve this condition.

A duodenoscope is used; this is a flexible tube thinner than your index finger with a light at the end. It is passed into the mouth, through the stomach to the duodenum to find the small opening (called Ampulla of Vater) where the bile and digestive juices drain into the intestine. A tube is passed through the duodenoscope and up into the Ampulla so that contrast (dye that can be seen on an x-ray) can be injected. X-rays are then taken.

Sometimes we need to make a small cut in the Ampulla so that gallstones which are stuck in the bile duct can be removed; this is called a sphincterotomy and is painless.

In other cases we need to put a tube called a stent into an area where the bile duct is blocked to allow the bile to drain.
Sometimes it is helpful to take a biopsy - sample of the lining of the ducts. This is done by passing a small instrument called forceps through the duodenoscope to ‘pinch’ out a tiny bit of the lining (about the size of a pinhead) which is sent to the laboratory for analysis.

These procedures usually take about 15 minutes but times vary considerably. If it takes longer, you should not worry.

**Getting ready for the procedure**

The medical team looking after you will discuss with you why they want you to have this procedure so that when you arrive in the department you can sign a consent form with the endoscopist. You can change your mind about having the procedure at any time.

We will give you a sedative (by injection into a vein) to make you feel relaxed and sleepy. The sedative will not put you to sleep (this is not a general anaesthetic). It is an injection into a vein, which will make you feel relaxed and sleepy but not unconscious. Some people will also need to have antibiotics.

The sedative will continue to have a mild effect for up to 24 hours and may leave you unsteady on your feet for a while.

**What happens during the procedure**

In the procedure room, you will be asked to remove glasses, false teeth and hearing aids in the left ear. We will make you comfortable on the x-ray table lying on your left side with your left arm behind your back. For your comfort and reassurance, a trained nurse will stay with you throughout.

The endoscopist will give you the sedative injection. We will put a plastic guard into your mouth so that you do not bite and damage our instrument. We will also put a plastic ‘peg’ on your finger to monitor your pulse and oxygen levels.

As the tube is gently passed through your mouth you may gag slightly; this is quite normal and will not interfere with your breathing. During the procedure some air will be put in to your stomach so that the endoscopist will have a clear view. This may make you burp and belch a little, some people find this uncomfortable. Please note, however, that you should generally not be aware of the procedure because of the sedative drugs administered beforehand.

Minimal restraint may be appropriate during the procedure. However if you make it clear that you are too uncomfortable the procedure will be stopped.

Occasionally it is not possible to complete the procedure. This may be due to difficulty passing the endoscope through the stomach, difficulty gaining access to the bile duct or because of a problem in the bile duct that cannot be surpassed. The endoscopist will weigh up whether to persevere depending on the clinical need although safety is paramount.
Potential risks
This procedure involves x-rays; **if you are pregnant, you should not have this procedure.**

ERCP procedures carry a small risk (1 in 100) of haemorrhage (bleeding) or perforation (tear).

If a cut is made into the bile duct there is a risk of 1 in 50 of significant bleeding. This can be treated straight away through the duodenoscope and rarely is a major complication, however if it is severe sometimes blood transfusion or surgery is needed.

Occasionally inflammation of the pancreas (pancreatitis) may develop (1 in 20); it can be painful and usually requires you to stay in hospital for a few days for intravenous fluids and painkillers. On very rare occasions, it may be more severe than this.

There may be a slight risk to crowned teeth or dental bridgework and you should tell the endoscopist if you have any of these.

Other rare complications include aspiration pneumonia (inflammation of the lungs caused by inhaling or choking on vomit) and adverse reactions to intravenous sedative drugs and, when used, antibiotic treatment.

You can be reassured that your doctors will only have recommended ERCP if the benefit to you from the procedure clearly outweighs these small risks.

After the procedure
Following the procedure, we will take you to a recovery area until you are awake enough to be returned to your ward. An intravenous antibiotic may be administered if the endoscopist feels this is appropriate. We will always do our best to respect your privacy and dignity, e.g. with the use of curtains. If you have any concerns, please speak to the department sister or charge nurse. If you are discharged from hospital within 24 hours of your procedure you are advised not to drive, operate machinery, return to work, drink alcohol or sign any legally binding documents. You are also advised to have a responsible adult stay with you for the next 12 hours.

The back of your throat may feel sore for the rest of the day. You may also feel bloated if some air remains in your stomach. Both these discomforts will pass and need no medication.

If you experience any of the following please contact your GP, the Endoscopy Department 01223 216515 or the Accident and Emergency department 01223 217118 for further advice:

- severe pain
- black tarry stools
- persistent bleeding.
When will I know the result?
You are likely to remain sleepy when taken back to your ward so it is usually not possible to be informed of the result straight away. The endoscopist (particularly if admitted via the day-case ward) or the medical team looking after you will be able to inform you before you leave hospital. The result, as a written report, will be filed in your hospital notes before you leave the endoscopy department so the information is immediately available for the medical team on your ward.

Details of the results and any further treatment should be discussed with the doctor who recommended you have this procedure. Usually, follow up arrangements are established before you leave hospital.

Alternatives:
There are no real alternatives to therapeutic ERCP. In some cases, depending on individual factors such as the symptoms present and the condition being investigated, alternatives may be:
- Magnetic resonance cholangio-pancreatography (MRCP) – diagnostic only.
- Percutaneous transhepatic cholangiography (PTC) – through the skin and can sometimes be therapeutic in itself or to assist ERCP if failed.

For more information:
- Contact the Endoscopy Office between 09:00 and 17:00 Monday to Friday on 01223 216546.
- See www.addenbrookes.org.uk/consent
**ERCP Morning Appointment – Patients with Diabetes**

Please follow these instructions if you have diabetes which is controlled with insulin or tablets.

If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078

**Food and Drink**

- Do not eat for six hours prior to your appointment
- Do not drink for three hours prior to your appointment
- Test your blood glucose regularly. If it drops below 4, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml, until your level is 5.
- After your procedure you may eat and drink normally unless specifically told otherwise

**Insulin and Tablets** please adjust your normal insulin and tablet doses as instructed below

If you take insulin **once** daily

- No change to insulin dose necessary

If you take insulin **twice** daily

- Do not have your morning insulin. Bring it with you, plus something to eat
- If you are able to eat before 11:00, have your normal morning dose with food
- If you are able to eat after 11:00, have ½ your normal morning dose with food
- Have your normal evening dose

If you take insulin **four times** daily

- Do not have your morning insulin. Bring it with you, plus something to eat
- If you are able to eat before 11:00, have your normal morning dose with food
- If you are able to eat after 11:00, omit your breakfast dose and have your normal lunchtime dose with food
- Have your normal tea time and bedtime evening doses

If you take **tablets** for diabetes

- Do not have your morning diabetic tablets
- After your procedure, re-start your tablets at the next dose time
ERCP Afternoon Appointment – Patients with Diabetes

Please follow these instructions if you have diabetes which is controlled with insulin or tablets.
If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078

Food and Drink
- Do not eat for six hours prior to your appointment
- Do not drink for three hours prior to your appointment
- Test your blood glucose regularly. If it drops below 4, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml until your level is 5.
- After your procedure you may eat normally unless specifically told otherwise.

Insulin and Tablets please adjust your normal insulin and tablet doses as instructed below

If you take insulin once daily
- No change to insulin dose necessary

If you take insulin twice daily
- Have your normal morning insulin dose unless your breakfast is smaller than usual. If so reduce your normal dose by 1/2.
- Have your normal evening dose

If you take insulin four times daily
- Have your normal morning insulin.
- Do not have your lunchtime insulin
- Have your normal tea time and bedtime evening doses

If you take tablets for diabetes
- Do not have your morning diabetic tablets
- After your procedure, re-start your tablets at the next dose time
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Document history
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01223 216515
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