Enteroscopy the procedure explained

Please bring this booklet with you
Introduction

Enteroscopy information

You have been advised by your GP or hospital doctor to have an investigation known as an enteroscopy.

This procedure requires your formal consent.

If you are unable to keep your appointment, please notify the department as soon as possible. This will enable the staff to give your appointment to someone else and they will be able to arrange another date and time for you.

Please bring this booklet with you when you attend.

This booklet has been written to enable you to make an informed decision in relation to agreeing to the investigation. At the back of the booklet is the consent form.

The consent form is a legal document therefore please read it carefully. Once you have read and understood all the information, including the possibility of complications, and you agree to undergo the investigation, please sign and date the consent form. You will notice that the consent form is duplicated, allowing you to keep a copy for your records, please fill it in while it is still attached to this booklet.

If however there is anything you do not understand or wish to discuss further do not sign the form but bring it with you and sign it after you have spoken to a health care professional.

The procedure you will be having is called an enteroscopy.

This is an examination of your small intestine. It will be performed by or under the supervision of a trained endoscopist and we will make the investigation as comfortable as possible for you. When you are having an enteroscopy procedure you will usually be given sedation and analgesia.
Why do I need to have an enteroscopy?

- You may have been advised to undergo this investigation of your small bowel to try and find the cause for your symptoms, help with treatment, and if necessary, to decide on further investigation.
- Follow-up inspection of previous disease.
- Assessing the clinical importance of an abnormality seen on an x-ray.
- A barium small bowel meal examination is an alternative investigation to enteroscopy. It has the disadvantage that samples of the bowel cannot be taken if an abnormality is found. If this is the case a subsequent endoscopic examination may be required.

What is an enteroscopy?

This test is a very accurate way of looking at the lining of your small bowel, to establish whether there is any disease present. This test also allows us to take tissue samples (biopsy) for analysis by the pathology department if necessary.

The instrument used in this investigation is called an enteroscope, (scope) and is flexible. Within each scope is an illumination channel which enables light to be directed onto the lining of your intestine, and another which relays pictures back, onto a television screen. This enables the endoscopist to have a clear view and to check whether or not disease or inflammation is present.

During the investigation the endoscopist may need to take some samples from the lining of your small bowel for analysis: this is painless. The samples will be retained. A video recording and/or photographs may be taken for your records.
Preparing for the investigation

Eating and drinking

It is necessary to have clear views of the small bowel.

If you are having enteroscopy from the top

You will need to fast for 6 hours to ensure that the stomach and upper small bowel is empty. You can drink small amounts of water up to 3 hours before the test but no fluids after that.

If you are having enteroscopy from the bottom

If you are having an examination of the lower small bowel from below you will need to take bowel preparation to clear out the colon.

Two days before your appointment

- You will need to be on a low fibre diet and considerably increase your fluid intake. A diet sheet is included with the laxative sent to you.

One day before

- You should take clear fluids only (no solid food) e.g. glucose drinks, Bovril, black tea and coffee with sugar, clear soups and fruit jelly.

- In addition you will need to take a laxative which should have arrived with this booklet along with clear instructions on how to administer it. If you have any queries do not hesitate to contact the endoscopy unit and someone will assist you.

On the day of the examination

- You may continue taking clear fluids until you attend for your appointment.
What about my medication?

Routine Medication

Your routine medication should be taken.

If you are taking iron tablets you must stop these one week prior to your appointment. If you are taking stool bulking agents (e.g. Fybogel, Regulan, Proctofibe), Loperamide (Imodium) Lomotil or Codeine Phosphate you must stop these 3 days prior to your appointment.

Diabetics

If you are diabetic controlled on insulin or medication, please ensure the Endoscopy department is aware so that the appointment can be made at the beginning of the list.

Please see guidelines printed at the back of the book.

Anticoagulants/Allergies

Please telephone the unit if you are taking anticoagulants or antiplatelet tablets eg warfarin, Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis). Clopidogrel (Plavix) or Prasugrel (Effient).
How long will I be in the endoscopy department?

This largely depends on how quickly you recover from the sedation and how busy the department is. You should expect to be in the department for approximately 3 hours.

The department also looks after emergencies and these can take priority over our outpatient lists.

What happens when I arrive?

When you arrive in the department, you will be met by a qualified nurse or health care assistant who will ask you a few questions, one of which concerns your arrangements for getting home. You will also be able to ask further questions about the investigation.

The nurse will ensure you understand the procedure and discuss any outstanding concerns or questions you may have. As you will be having sedation she may insert a small cannula (small plastic tube) in the back of your hand through which sedation will be administered later.

**As you will have sedation you will not be permitted to drive or use public transport so you must arrange for a family member or friend to collect you.** The nurse will need to be given their telephone number so that she can contact them when you are ready for discharge.

You will have a brief medical assessment when a qualified endoscopy nurse will ask you some questions regarding your medical condition and any surgery or illnesses you have had to confirm that you are fit to undergo the investigation.

Your blood pressure and heart rate will be recorded and if you are diabetic, your blood glucose level will also be recorded. Should you suffer from breathing problems a recording of your oxygen levels will be taken.

If you have not already done so, and you are happy to proceed, you will be asked to sign your consent form at this point.
Intravenous sedation

The sedation and a painkiller will be administered into a vein in your hand or arm which will make you slightly drowsy and relaxed but not unconscious. You will be in a state called co-operative 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 makes it unlikely that you will remember anything about the examination.

Whilst you are sedated, we will monitor 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 as you have had sedation you must not drive, take alcohol, operate heavy machinery or sign any legally binding documents for 24 hours following the procedure and you will need someone to accompany you home and remain with you over night.

The enteroscopy investigation

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

The nurse looking after you will ask you to lie on your left side. She will then place the oxygen monitoring probe on your finger.

The sedative drugs will be administered into a cannula (tube) in your vein.

The enteroscopy involves manoeuvring the enteroscope through the stomach and down the small bowel from above or around the large bowel and up the lower small bowel from below. There are some bends that naturally occur in the bowel and negotiating these may be uncomfortable for a short period of time but the sedation and analgesia will minimise any discomfort.

Air is gently passed into the bowel during the investigation to facilitate the passage of the enteroscope.

During the procedure samples may be taken from the lining of your bowel for analysis in our laboratories. These will be retained.
Risks of the procedure

Enteroscopy is classified as an invasive investigation and because of that it has the possibility of associated complications. These occur extremely infrequently; 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 with administration of the sedation.

The endoscopic procedure

The main risks are of mechanical damage;

- Perforation (or tear in the bowel wall) risk approximately 1 for every 1,000. An operation is nearly always required to repair the hole. The risk of perforation is higher with polyp removal.

- Bleeding may occur at the site of biopsy or polyp removal (risk approximately 1 for every 100-200 examinations where this is performed). Typically minor in degree, such bleeding may either simply stop on its own or if it does not, be controlled by cauterization or injection treatment.

- Pancreatitis (inflammation of the pancreas gland) can occur rarely (less than 1 in 100). This only occurs with examinations from the top.

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 due to a bad chest) may be assessed by a doctor before having the procedure.
What is a polyp?

A polyp is a protrusion from the lining of the bowel. Some polyps are attached to the intestinal wall by a stalk, and look like a mushroom, whereas others are flat without a stalk. Polyps when found are generally removed or sampled by the endoscopist as they may grow and later cause problems. Flat polyps are generally a little more difficult to remove.

Polypectomy

A polyp may be removed in several ways using an electrical current known as diathermy.

For large polyps a snare (wire loop) is placed around the polyp, a high frequency current is then applied and the polyp is removed.

Flat polyps (without any stalk) can be removed by a procedure called EMR (Endoscopic Mucosal Resection). This involves injecting the lining of the bowel that surrounds the flat polyp. This raises the area and allows the wire loop snare to capture the polyp.

For smaller polyps biopsy forceps are used to hold the polyp whilst the diathermy is applied, therefore destroying the polyp.

After the procedure

You will be allowed to rest for 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 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 (which normally takes 30-60 minutes), you will be moved to a comfortable chair and offered a hot drink and biscuits. Before you leave the department, the nurse or endoscopist will discuss the findings and any medication or further investigations required. She or he will also inform you if you require further appointments.

The sedation may temporarily affect your memory, so it is a good idea to have a member of your family or friend with you when you are given this information although there will be a short written report (discharge letter) given to you.
Because you have had sedation, the drug remains in your blood system for about 24 hours and you may feel drowsy later on, with intermittent lapses of memory. If you live alone, try and arrange for someone to stay with you or, if possible, arrange to stay with your family or a friend for at least 4 hours.

If the person collecting you leaves the department, the nursing staff will telephone them when you are ready for discharge.

**General points to 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.

- The hospital cannot accept any responsibility for the loss or damage to personal property during your time on these premises.

- If you are unable to keep your appointment please notify the endoscopy department as soon as possible.

- Because you are having sedation, please arrange for someone to collect you.

- If you have any problems with persistent abdominal pain or bleeding please contact the endoscopy helpline for advice. Contact details will be on your discharge letter.
Specific advice for people with diabetes

Treatment by diet alone
If you control your diabetes with diet alone, you simply need to follow the instructions given to you to prepare for your enteroscopy.

Treatment by tablets and/or insulin
If you are having enteroscopy from the top
You will need to fast for 6 hours to ensure that the stomach and upper small bowel is empty. You can drink small amounts of water up to 3 hours before the test but no fluids after that.

Afternoon Appointments
Insulin treated patients
- Ensure endoscopy unit is aware that you have insulin treated diabetes so you may be given an appointment near the beginning of the list.
- Have a suitable drink equivalent to 20 gm carbohydrate (see above) to avoid the risk of hypoglycaemia between 10:30 and 11:00am.
- Have half the morning dose of insulin with a light breakfast at 8am.
- Inform the nurse immediately if you feel any symptoms of hypoglycaemia.

You should be aware that blood sugar levels may be disturbed by the change in your routine but should return to normal within 24-48 hours.
Diet and Tablet Treated Patients

- Ensure endoscopy is aware that you have diabetes so you can be given an appointment near the beginning of the list.
- Do not take diabetes tablets before the procedure. You may resume normal medication afterwards.
- Delay any tablets taken for diabetes given at lunchtime until you are able to eat and drink safely after the procedure.

Be aware that blood sugar levels may be disturbed by the change in your routine but should return to normal within 24 – 48 hours.

If you are having enteroscopy from the bottom

Preparation on first day

As advised earlier in this sheet there are two days of preparation before the examination. When following the low fibre diet on the first day try to make sure you eat your usual amounts of carbohydrate from the allowed list eg white bread, white rice, pasta etc. Continue to take your usual tablets and/or insulin and check your blood sugar levels as usual.

Adjusting your diabetes medication to prevent hypoglycaemia

You will need to reduce your treatment the day before and the morning of the procedure to prevent the risk of hypoglycaemia (low blood sugar level). As a result your blood sugar control may be a little higher than usual. This is only temporary to maintain your blood sugars through the procedure and you should be back to your usual level of control within 24 to 48 hours.

If you have concerns about adjusting your dosage, please contact the Diabetes Nursing Team, well in advance of the appointment, to discuss appropriate measures.
Carrying Glucose to treat Hypoglycaemia

On the day before and day of the procedure carry glucose tablets in case of hypoglycaemia. As these are absorbed quickly through the tissues of the mouth, if sucked, they will not interfere with the procedure. Take three (3) tablets initially, followed by a further three (3) after 10 minutes if symptoms persist. If your medication has been adjusted this should not be a problem.

Blood Sugar Monitoring

If you usually test your blood sugar levels, check them, as usual, on the morning of the procedure and bring your monitoring 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.

People taking diabetes tablets

**Day before enteroscopy – clear fluids only**

Aim to have carbohydrate at your usual meal times from the list of permitted clear fluids. You can have sugary fluids, fruit juice or fruit jelly to replace your usual carbohydrates.

- If taking Metformin do not take until you are eating again after the enteroscopy
- If taking Rosiglitazone (Amaryl) or Pioglitazone (Starlix) do not take until after the enteroscopy.
- If taking Gliclazide, Glibenclamide, Tolbutamide, Repaglanide or Glimepiride take half your morning dose and do not take again until after the test.
The day of the enteroscopy

- Do not take your morning dose of tablets; bring your tablets with you to have after the procedure.
- Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time during your visit.
- Your dosage of tablets can be given as soon as you are able to eat and drink safely; the nursing staff will inform you when this is safe.

People on insulin

Day before the enteroscopy

- Aim to have carbohydrate at your usual meal times using fluids from the list of permitted clear fluids.
- You will need to reduce your usual insulin doses to avoid the risk of hypoglycaemia (low blood sugar). You should reduce each of your insulin doses by at least a third except if taking Lantus or Levemir. This should be continued at the normal dose.
- If you have concerns about adjusting your insulin dosage please contact the Diabetes Nursing Team well in advance of the appointment to discuss appropriate measures.

Day of the enteroscopy

- Do not take your morning dose of insulin; bring your insulin with you to have after the procedure.
- If you take Lantus or Levemir continue your normal dose.
- Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time during your visit.
- Your morning dose of insulin can be given as soon as you are able to eat and drink safely; the nursing staff will inform you when this is safe.
Enteroscopy

Inspection of the small intestine with a flexible endoscope (with or without biopsy, photography, removal of polyps, injection treatment).

Biopsy samples will be retained.

Statement of patient

You have the right to change your mind at any time, including after you have signed this form.

I have read and understood the information in the attached booklet including the benefits and any risks.

I agree to the procedure described in this booklet and on the form.

I understand that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

Where a trainee performs this examination, this will be undertaken under supervision by a fully qualified practitioner.

I would like to have:  Sedation ☐ No sedation ☐ Please tick box

Signed ____________________________  Date ____________

Name (print in capitals)

If you would like to ask further questions please do not sign the form now. Bring it with you and you can sign it after you have talked to the healthcare professional.

Confirmation of consent (to be completed by a health professional when the patient is admitted for the procedure).

I have confirmed that the patient/parent understands what the procedure involves including the benefits and any risks.

I have confirmed that the patient/parent has no further questions and wishes the procedure to go ahead.

Signed ____________________________  Date ____________

Name (print in capitals)  Job title
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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