Patient information



Endoscopic submucosal dissection (ESD) of the bowel

The purpose of this information sheet is to explain your forthcoming procedure. This information sheet covers frequently asked questions.

Please read this information leaflet and complete the medical questionnaire on pages 5 and 6 before you arrive for your procedure.

What is an endoscopic submucosal dissection (ESD)?

Endoscopic submucosal dissection, also known as ESD, is a procedure where a lesion or polyp is removed from your bowel.

The procedure will be carried out using a colonoscope (flexible camera) that is passed around the bowel to access the area of irregularity. When the lesion or polyp has been located, it is raised by injecting fluid into the tissue underneath. The injection increases the thickness of the bowel wall, making it easier and safer to remove the lesion. The lesion is then removed using diathermy (heat treatment) which allows the lesion, along with some of the tissue underneath, to be cut and removed. You will not feel this.

Why am I having an ESD?

Your previous endoscopy or test has found a lesion or polyp in your bowel. In most cases the biopsies (small samples of tissue) have indicated the lesion or polyp requires removal as a single fragment. Removing the lesion in one piece gives the pathologists (the doctors who examine the tissue under the microscope) the greatest opportunity to know if it has been fully removed. All tissue samples have to be sent away to the laboratory so the results will not be available straight away. You will be able to discuss the results of your ESD with the doctor who referred you.

What should you do in preparation for the procedure?

To allow a clear view, the colon must be completely empty of faeces (poo). You will need to follow a low residue diet and take an oral bowel preparation (prep) to clear your bowel of faeces.

Please read and follow our instructions carefully.

 Please let the unit know before the procedure if there is a risk you could be pregnant or breastfeeding.

- Follow bowel prep instructions carefully. Poor preparation may result in a failed procedure that needs to be repeated. There should be CLEAR, brown water being produced at the end of the bowel preparation.
- Please take the bowel prep slowly to prevent nausea and vomiting.
- If you suffer with constipation, we advise two tablets of senakot each evening for 5 days before.
- Squash can be added to bowel prep to flavour. A drinking straw helps to reduce taste.
- If you are taking an oral contraception pill you should take alternative precautions the week following the procedure.
- **Stop taking** iron tablets, ferrous sulphate or vitamin tablets containing iron **7 days before** your procedure.
- A low residue diet should be started 5 days before your procedure (see page 9).
- Anti-hypertensives (blood pressure) and any critical medications, such as anti-rejection meds, epilepsy, Parkinson's and heart tablets, should be taken as per normal with only a small amount of water to avoid your procedure being cancelled.
- Do not take your medicines less than 2 hours before or after taking your preparations as it may affect its absorption.
- On the day you start to take the sachets of Plenvu, **do not take your diuretics** (water tablets) as you may become dehydrated.
- **Insulin dependent diabetic patients** should contact the diabetic specialist nurses before the procedure see the 'useful contacts' at the end of this information sheet.
- Tablet controlled diabetic patients, please ring the endoscopy nurse's enquiry line for advice see the 'useful contacts' at the end of this information sheet.
- If you have **renal conditions**, you should be issued with Movi-prep.
- Patients on **anticoagulant medication** (blood thinners), please ring the endoscopy nurse's enquiry line for advice see the 'useful contacts' at the end of this information sheet.
- If you have a **pacemaker**, ring the nurses' enquiry line. Please have the details and serial number of your pacemaker available. This information will be on your pacemaker card.
- If possible, remove nail varnish from fingers.

Admission to the Endoscopy Unit

On arrival to the department you will be asked to wait in the waiting area. If a relative has come with you, they may go home and be contacted when you are ready for discharge or may wait in the department. The time of your admission may not be the time you will have your procedure, please be prepared to stay for 3-4 hours.

You will be escorted to an admitting room where all relevant details will be recorded and the procedure explained. You will need to undress for this procedure and wear a hospital gown. You will be asked to sign the consent form on admission, if you have not already done so. This is to ensure that you understand the procedure and any possible complications. A cannula (small needle) will be inserted to administer medication.

What happens during the procedure?

In the examination room you will meet another nurse who will be assisting the endoscopist. You will lie on your left side with your knees slightly bent, oxygen will be given via your nose. You will have the option of medicine through your vein (a painkiller and a sedative) to make you relaxed or Entonox which you control yourself by breathing it in. You are offered these because the procedure can be uncomfortable, causing cramp-like abdominal pain.

Your nurse will stay with you throughout your procedure. They will attach a probe on your finger to monitor your general condition.

The endoscopist will examine your back passage with a finger, then the colonoscope is gently inserted through the back passage and the bowel inflated with carbon dioxide or air. This may give you some discomfort. You may also get the sensation of wanting to go the toilet, but as the bowel is empty there is no danger of this happening. A suction channel in the instrument can remove any fluid left in the bowel, so don't worry.

You may pass some wind and, although this may be embarrassing, the staff do understand it is the air the endoscopist is putting in. Once the procedure is finished you will be taken to a recovery area where you will be offered something to eat and drink.

Risks

- Follow the bowel preparation instructions carefully. If the bowel is not clear, the procedure may need repeating again.
- All procedures of this nature carry a small risk of bleeding or perforation to the mucosal lining.
- You may react to the medication used, but this is rare.

Benefits

- No exposure to radiation.
- Better visualisation. An opportunity to take a biopsy or remove a polyp.
- In the majority of cases, the ESD is performed as a day case procedure.
- Time taken to recover and discomfort after the procedure is far less when compared with surgery.

Alternatives

- Endoscopic Mucosal Resection (EMR).
- Keyhole or open surgery.
- Transanal Endoscopic Microsurgery (TEMS).

What will you need to bring with you on the day?

- Please bring any inhalers and medication needed with you.
- Please do not bring any valuables with you, apart from your mobile phone if you wish to.
- If you have an exemption certificate, please bring it with you in case you are prescribed medication.
- You can bring a book or magazine as you could be in the unit for a while.
- Please check with your nurse on arrival for an estimated time for your friend/relative to collect you.
- Please bring a dressing gown, slippers and toiletries, and wear loose fitting clothing.
- The waiting areas in the Endoscopy Centre are mixed sex facilities. However, where
 patients wait for the procedure, same sex facilities are provided to maintain your privacy
 and dignity.

Entonox gas or sedation?

Entonox

We would like to offer our patients the opportunity to use Entonox gas during their procedure due to the analgesic effect obtained. Entonox gas has been used in obstetrics since 1961 and then by the ambulance service since 1970 as an effective form of pain control.

The benefits of Entonox gas are:

- Rapid onset of pain relief within 1-2 minutes.
- Minimal side effects no serious adverse effects being reported.

- Ease of administration you can self-administer under our supervision.
- Short duration effects disappear rapidly once Entonox is withdrawn and you may drive home.

Sedative and painkiller

A sedative and painkiller may be worth considering if you are anxious about the procedure, the admission nurse will help you come to a decision. It will be administered through the line that you will already have had inserted in your arm/hand. It may have an amnesic effect (give you short term memory loss) but it will not 'knock you out' as the endoscopist may require you to change position to help the camera round.

If you choose to have this, it is **ESSENTIAL** that you organise for someone to pick you up and stay with you for the rest of the day. **You cannot drive for 24hrs** as insurance may be invalid. Also, following sedation **you should not:**

- drink alcohol for 24 hours.
- operate machinery for 24 hours.
- return to work for 24 hours.
- sign important documents.

Plenvu

Please follow this instruction leaflet very carefully. It has been designed specifically for the procedure and may differ from the manufacturer's instructions.

What is the medicine 'Plenvu' used for?

Plenvu sachets have been prescribed to empty your bowel prior to the procedure.

- The pack consists of three sachets: dose 1, and dose 2 (sachets 'A' and 'B').
- Plenvu is a powerful laxative and you need to take <u>all</u> of the bowel preparation for it to be effective.
- **Do not use Plenvu** if you are pregnant or breastfeeding, or allergic to any of the ingredients (please refer to the manufacturer's leaflet for the ingredients).
- If you are frail or elderly it is advised that you have someone with you once you start taking your bowel preparation.

Effects of Plenvu

- Very soon after taking the preparation, or within a few hours, you will experience diarrhoea. You may get some stomach cramps, dizziness, nausea or vomiting, or a sore bottom. Do not go out but stay close to the toilet. These feelings should ease but may not completely go. Continue to drink clear fluids.
- It is advisable to use a barrier cream around your bottom, e.g. Vaseline, white paraffin etc., to help prevent soreness.
- If you have a stoma bag, your stoma output will increase with the bowel preparation. You are advised to stay close to toilet facilities and have plenty of spare stoma equipment. Please call your stoma team to provide the right equipment before you start to take the preparation.

Medical questionnaire

The next section is for you to complete prior to arriving at the Endoscopy and Day Surgery Unit. Please bring this with you on the day of the procedure.

It is important that you fill it in accurately so that the nursing staff can provide you with the best care possible. If you have any concerns or questions, please call the nurses' enquiry line - see the 'useful contacts' at the end of this information sheet.

Medical questionnaire

HEART	Yes	No
Heart disease		
Valve surgery, angina, heart attack		
When did you last have chest pain		
High blood pressure		
Rheumatic Fever		
Stroke		
Circulation (e.g.) thrombosis)		
Other		
Did any of above require		
anticoagulants		
Nursing notes		

GASTROINTESTINAL TRACT	Yes	No
Stomach (e.g. ulcers, hiatus hernia)		
Bowel (irritable bowel, polyps, cancer)		
Nursing notes		

OTHER CONDITIONS	Yes	No
Diabetes		
Epilepsy		
Anaemia		
Glaucoma		
Addison's disease		
Nursing notes	•	•

LUNG	Yes	No
Lung Condition (e.g. emphysema,		
asthma)		
Coughing up blood		
Other		
Nursing notes		

OTHER DETAILS	Yes	No
Dentures		
Hearing Aid		
Glasses/contact lenses		
Body piercing		
Metal joints or any bones pinned		
Are you sensitive/allergic to anything? (e.g. antibiotics/latex/foods/adhesive etc		
Nursing notes	1	ı

LIVER/KIDNEY/URINARY TRACT	Yes	No
Liver Condition (e.g. jaundice, cirrhosis)		
Kidney (e.g. kidney stones, infection)		
Urinary Tract (e.g. infection, blood in urine)		
Nursing notes		

<u>LIFESTYLE</u>	Yes	No
Do you smoke		
Do you take any illegal substances?		
Do you drink alcohol (If yes – how many units/week – 21 male/ 14 female)		

INFECTIOUS DISEASES	Yes	No
ТВ		
Hepatitis (B or C)		
HIV/AIDS		
MRSA/ Other		
Have you ever been notified that you		
are at risk of CJD or vCJD for public health service		

Nursing notes

Have you had any operations? Pl	ease give details:	
Name of medicine	Dosage (amount)	Number of times taken per
	J , ,	day
Endoscopist has been info	rmed of relevant conditions and me	edication Yes / No
Transferred to care plan		Yes / No
Next of kin name and address:	Telephone	e details:
Valuables disclaimer		
You are advised not to bring value items.	ables into the hospital. We cannot	accept responsibility for lost
Patient signature	Print	Date
Primary nurse signature	Print	Date

This next section is extremely important and contains instructions of when to start taking the bowel preparation.

On the next two pages you will see two grids:

- Page 7 is for patients attending a morning appointment.
- Page 8 is for patients attending an afternoon appointment.

Please be clear of your appointment time so that the correct grid is followed. If you are concerned about which grid to follow, please ring the nurses' enquiry line for advice.

Follow this page if your appointment/procedure is in the morning:

Appointment Day (AM)	7 Days Before	5 Days Before	Day Before	Procedure Day
Monday	Monday	Wednesday	Sunday	Monday
Tuesday	Tuesday	Thursday	Monday	Tuesday
Wednesday	Wednesday	Friday	Tuesday	Wednesday
Thursday	Thursday	Saturday	Wednesday	Thursday
Friday	Friday	Sunday	Thursday	Friday
Saturday	Saturday	Monday	Friday	Saturday
Sunday	Sunday	Tuesday	Saturday	Sunday
	7 days before your procedure stop taking any iron tablets or vitamin tablets containing iron until after your procedure.	Take a low residue diet 5 days before the procedure. See additional advice about low residue diet on page 9.	Low residue breakfast. No solid food after breakfast. Clear fluids may be drunk freely. 6pm: Prepare Dose 1 (1 sachet only of Plenvu as per leaflet). Sip the Plenvu slowly over 60 minutes. 9pm: Prepare Dose 2 of Plenvu (sachets A and B). Sip it slowly over 60 minutes. Drink an additional 500ml of water or clear fluids with EACH 500mls of Plenvu.	No Food. Continue to take clear fluids. No alcoholic drinks.

Follow this page if your appointment/procedure is in the afternoon:

Appointment Day (PM)	7 Days Before	5 Days Before	Day Before	Procedure Day
Monday	Monday	Wednesday	Sunday	Monday
Tuesday	Tuesday	Thursday	Monday	Tuesday
Wednesday	Wednesday	Friday	Tuesday	Wednesday
Thursday	Thursday	Saturday	Wednesday	Thursday
Friday	Friday	Sunday	Thursday	Friday
Saturday	Saturday	Monday	Friday	Saturday
Sunday	Sunday	Tuesday	Saturday	Sunday
	7 days before procedure stop taking any iron tablets or vitamin tablets containing iron until after your procedure.	Take a low residue diet 5 days before the procedure. See additional advice about low residue diet on page 9.	Low residue breakfast and lunch. No solid food after lunch. Clear fluids may be drunk freely. 6pm: Prepare Dose 1 (1 sachet only of Plenvu as per leaflet). Sip the Plenvu slowly over 60 minutes. Drink an additional 500ml of water or clear fluids with EACH 500mls of Plenvu.	No Food. 6 am: Prepare dose 2 of Plenvu (sachets A and B). Sip it slowly over 60 minutes. Drink a further 500ml of water. Allow 2 hours for Plenvu to work after finishing your second dose, before leaving for your appointment. Continue to drink clear fluids. No alcoholic drinks.

Low Residue Diet - Some suggestions for meals

Breakfast

- Cornflakes, rice krispies and milk. Natural plain yogurt.
- Seedless white bread or toast with butter or low fat spread, jam without seeds and rindless marmalade.
- Boiled egg on white toast.

Lunch

- White bread sandwich with low fat spread or butter with fillings of cheese, ham, tuna, with seedless mustard.
- Clear soup with white bread. Tofu.

Dinner

- Plain white pasta, noodles, chicken or any grilled meat, Quorn.
- White rice, poached fish.
- Egg and bacon quiche.
- Mashed, boiled or roast potatoes.

Do not eat:

- Wholemeal bread, cakes and biscuits, wholemeal flour (in cooking).
- Wholemeal pasta, high fibre white breads.
- High fibre cereal, e.g. Wheatbran, Allbran.
- · Wheatgerm, muesli, oatmeal and Weetabix.
- Pulses, fruit, e.g. figs, prunes, dates, blackberries, grapes, pears and tomatoes.
- Vegetables, e.g. broad beans, peas, butter beans, baked beans, brussel sprouts, celery and skin of the potato.
- Dried fruit and nuts, e.g. sesame seeds, sunflower seeds, almonds, hazelnuts, peanuts and brazil nuts.
- Jams and marmalade containing seeds and peel.

Please drink plenty of <u>clear</u> fluids as required until your procedure Clear fluids are:

- Clear fruit juice/cordials (except red or purple coloured juices).
- Fruit squash.
- Black tea or coffee.
- Clear soup.
- Bovril, Oxo.
- Fizzy drinks (i.e. lemonade, cola, Lucozade).

Please tick the checklist below to ensure you have read all the information and are ready for your procedure:

I have read this patient information sheet	
I have understood the information provided	
I have read the consent form (if given/sent one)	
I have arranged transport (if having sedation)	
I am aware of when I should stop eating	
I have contacted the diabetes nurse (if required)	
I have contacted the anticoagulant clinic (if required)	
I have contacted the nurses' enquiry line about my pacemaker check (if relevant)	

If you are unsure about anything, please contact us.

Your procedure could be cancelled if you have not followed the instructions properly.

Additional information

To view the Lister and New QEII site maps for navigating your way around our hospitals, please visit our Trust website - www.enherts-tr.nhs.uk

Useful contact details

East and North Hertfordshire NHS Trust:

- Website www.enherts-tr.nhs.uk
- Telephone 01438 314333

Endoscopy Unit - Lister and New QEII:

Lister: Telephone 01438 288603 - Option 1

New QEII: Telephone 01707 247728

Anticoagulation Clinic

• Lister: Telephone 01438 285335

New QEII: Telephone 01707 224032

Nurses' Enquiry Line

Telephone 01438 288603 (please ring between 8am - 10am and 4pm - 6pm) - Option 2

Diabetic Specialist Nurses

- Telephone 01438 284560
- Telephone 01438 284645
- Telephone 01438 284615

This is not an emergency service. Messages left on the answerphone may not be answered for 24-48hrs.



Leaflet information

You can request this information in a different format or another language; please speak to your doctor or nurse.

Date of publication: July 2024

Version number: 1

Author: Endoscopy Team

Reference: Endoscopy (ESD-Plenvu)

Review Date: July 2027

© East and North Hertfordshire NHS Trust

www.enherts-tr.nhs.uk