NHS
Royal Berkshire
NHS Foundation Trust

Transrectal endoscopic ultrasound explained

This leaflet tells you about having a transrectal endoscopic ultrasound (or TREUS) at the Royal Berkshire Hospital. It explains what is involved and the possible risks and aims to give you enough information to enable you to make an informed decision before agreeing to the investigation. If you have any questions or concerns, please do not hesitate to speak to the doctor or nurse caring for you in the Endoscopy Unit. Please bring this leaflet with you.

Introduction

Your GP or hospital doctor has advised you to have a procedure known as an endoscopic ultrasound scan (EUS). This is a day case procedure and it involves examination of your rectum (back passage) and sigmoid colon, which are parts of the large bowel. It will be performed using a flexible endoscope. The procedure usually takes less than 30 minutes. A phosphate enema will be given prior the procedure to clean the bowel. You can decide to have the procedure with sedation or Entonox (gas and air) or without anything. If you decide to have sedation, you will need to arrange for an adult to escort you from hospital and stay with you for 8 hours at home. The procedure will be carried out by an appropriately trained doctor.

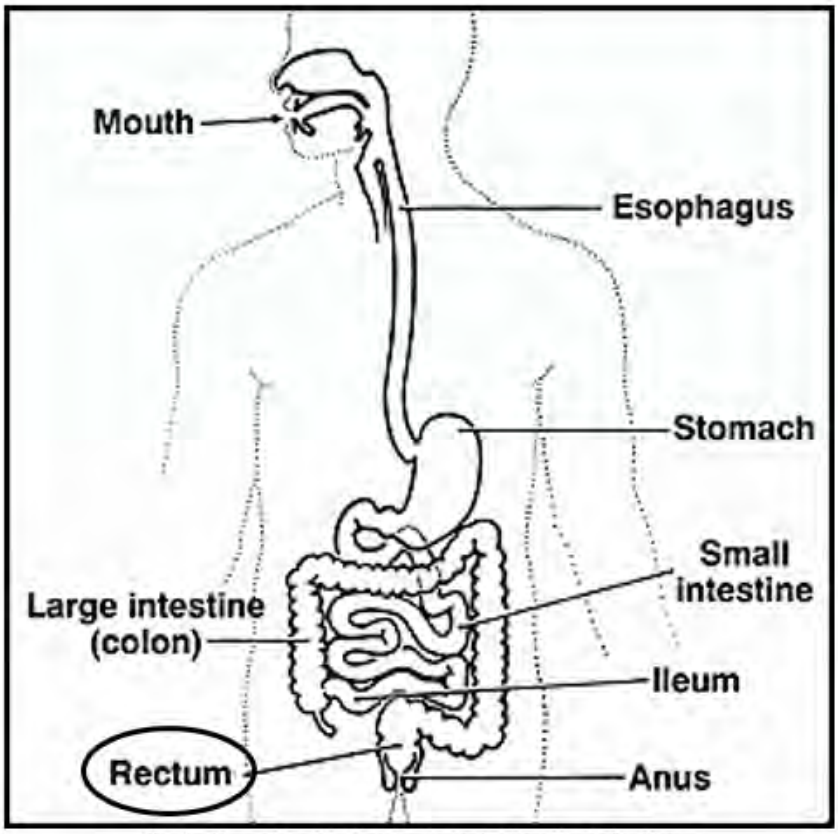

Illustration of inside the body including the intestines

Important information

- If you are unable to keep your appointment, please inform us on 0118 322 7459 as 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.
- **Any patients failing to attend for their appointment will not routinely be offered another appointment.**
- There is limited free drop off / collection parking and 3 disabled spaces outside the Endoscopy Unit. There are limited 30 minutes free drop off parking bays on the left side as you enter the car park. Some limited Pay and Display bays are available. Public parking can be found in the main multi-storey car park. The barriers of the multi-storey car park will automatically rise whether you have made a payment or not. Pay machines can be found on levels 0, 1, 2, and 3 and accept coins or card (no change given). Payment can also be made using the APOCA Connect App or on their website using the 'Late Pay Option' within 24 hours of exiting the car park.
- Please note that there is no access to the Endoscopy Unit through the main hospital; the entrance is on Craven Road. The unit is situated at the top of Craven Road, past the main entrance and Maternity Block when walking up the hill.
- Please arrive at the time stated in your letter so you can be assessed by the nurse and, if necessary, have a blood test taken pre-procedure.
- Please note your appointment time is your arrival time on the unit, not the time of your procedure, which will happen sometime later. There may be other patients in the unit who will arrive after you but are taken in for their procedure before you; this is for medical reasons or because they are seeing a different endoscopist (doctor).

For our information: collection details

Please write your relative's or friend's name and telephone number below:

Name _____

Telephone number _____

What is transrectal EUS?

- A transrectal EUS is an endoscopic procedure that uses ultrasound (sound waves at a higher frequency than can be heard by the human ear) to visualise the lining of the gut wall and the structures beneath and surrounding it.
- Within the endoscope is a channel that enables light to be directed onto the linings of the large bowel and another that displays the images on a monitor. Also, at the end of the 'scope' there is an ultrasonic transducer that helps to produce the ultrasonic pictures.
- Photographs and a video recording may be kept for your records and for documentation purposes.
- Sometimes, it is helpful to take a biopsy – a sample of the lining of the rectum or large bowel. This is done by passing a small instrument called a forcep through the endoscope to 'pinch' out a tiny bit of the lining (about the size of a pinhead), which is sent to the laboratory for analysis.

- Other times, if an abnormal area is identified within the internal organs, a very fine needle can be passed through the wall of the large bowel into the surrounding structure to take a sample. This is called an FNA/B (fine needle aspiration/biopsy). **If you need an FNA/B, you may need to stay in hospital overnight for observation; however, it is very unlikely that this will be required.** Whether you need to stay in hospital overnight will be decided following the procedure, so **it is advisable to bring an overnight bag with you** just in case.

Why do I need a EUS?

You have been advised to undergo this procedure to obtain more information about your lower digestive tract and the structures adjacent to it. The doctors or specialist nurse looking after you will be happy to explain the reason you need for this procedure, so please ask. The procedure may be similar to previous endoscopies you may have had, for example a flexible sigmoidoscopy.

Preparing for a EUS

- We advise you to wear loose-fitting clothing, as this is more comfortable for you during and after the test. Please bring a dressing gown and slippers if you have them.
- To allow a clear view during the investigation your bowel must be empty. It is essential that you use the enema one and a half (1½) hours before your appointment and follow the instructions on how to administer it at home. Please try to keep the fluid in your bowel for as long as possible if you can (for about 5 minutes) before going to the toilet.
- You may eat and drink normally up until the time you have the enema. After that you may only have clear fluids (no solid food), e.g. glucose drinks, Bovril, black tea and coffee, clear soup and fruit jelly (with no bits), until after the investigation.
- Instructions for using the enema are at the back of this leaflet and also in the box with the enema. In certain circumstances, we can arrange for the enema to be administered by the nurse upon your arrival in the Endoscopy Unit. If this is necessary, please arrive 30 minutes before the time stated on your appointment letter.

What about my medication?

- Stop taking iron tablets 7 days before the procedure.
- **Anticoagulants and antiplatelet (drugs that affect the blood):** Please telephone the Endoscopy Unit on 0118 322 7459 if you are taking anticoagulants such as Warfarin, Clopidogrel, Dabigatran, Rivaroxaban, Apixaban, Edoxaban, Prasugrel and Ticagrelor, Dipyridamole. These medications might need to be paused for a period of time, depending on the details of your procedure and medical guidance will be offered to you in advance.
- All other routine medication should be taken as normal, including diabetes medications.

How long will I be in the Endoscopy Unit?

Your length of stay depends upon how busy the department is. You should expect to be in the unit for approximately **2-4 hours**. The unit also looks after emergencies and these can take priority over outpatients. If you require an overnight stay following an FNA/B, you will be transferred from the unit to a ward.

What happens when I arrive?

- On arrival, please go to the main desk where the receptionist will check your personal details.
- You will be greeted by a nurse and escorted to the assessment area. Here we will ask you some questions about your medical history.
- **If you decide to have sedation, you are not permitted to drive, take alcohol, operate heavy machinery or sign any legally binding documents for 24 hours afterwards. Following the procedure, you must have someone to accompany you home and stay with you for up to 8 hours. You are not allowed home alone in a taxi. If you are having sedation and you do not have anyone to accompany you home, your procedure will be cancelled.**
- The nurse will need the name and telephone number of the person escorting and supervising you at home and they will be contacted when you are ready for discharge home.
- The nurse will ensure you understand the procedure and discuss any outstanding concerns or questions you may have.
- You will have a brief medical assessment with the endoscopy nurse, who will ask you some questions regarding your medical history and any past surgery or illnesses you have had, to ensure you are sufficiently fit to undergo the procedure.
- Your blood pressure and heart rate will be recorded and if you have diabetes, your blood glucose level will also be recorded. If you suffer from breathing problems, a recording of your oxygen levels will be taken.
- If you are on anticoagulant drugs, you may need a blood test to check your blood clotting level.
- You will be asked to sign an electronic consent form.
- Once this is completed, you will be escorted to a single sex changing room. You will be asked to change into a gown and ‘dignity shorts’ ready for the procedure. Your escort cannot wait with you from this point and can leave the department until you are ready to go home.
- You can change your mind about having the procedure at any time.

Sedative options

For many people transrectal EUS is only slightly uncomfortable and sedation is not required.

The options are:

1. **No sedation**: The advantage is that you can leave as soon as the procedure is finished after you have spoken to the endoscopist. You may resume your normal activities such as working and driving. You will be fully aware of the procedure; most patients find this acceptable.
2. **Entonox**: also known as ‘gas and air’; this is used to relieve pain and discomfort during the procedure. It works quickly and allows you to control how much you use. You can leave the department after 30-60 minutes and can continue with your normal activities.
3. **Intravenous sedation and pain relief**: we will give you the medication into a vein to make you feel relaxed and sleepy but not unconscious (this is not a general anaesthetic). Some patients may not remember everything that occurred during the procedure.

Things to know if you decide to have intravenous sedation and pain relief

- The sedation and painkiller will be given via a cannula directly to a vein in your hand or arm. This will make you lightly drowsy and relaxed but not unconscious. You will be in a state called co-operative sedation (also known as conscious sedation): this means that, although drowsy, you will hear what is said to you so will be able to follow simple instructions during the procedure. Sedation makes it unlikely that you will remember anything about the procedure.
- While you are sedated, we will continually check your breathing and heart rate, so any changes will be noted and dealt with accordingly. You will be connected by a finger probe to a pulse oximeter, which measures your oxygen levels and heart rate during the procedure. You will be able to breathe normally throughout. Your blood pressure may also be recorded.
- You will need to stay whilst you recover which may take up to an hour, this may be longer in some instances.
- You will need to be escorted home; your procedure will be cancelled if you do not have an escort.
- The injection will continue to have a mild sedative effect for up to 24 hours and may leave you unsteady on your feet for a while.

The procedure

- You will be escorted to the procedure room, where the team will introduce themselves.
- The nurse looking after you will ask you to lie on your left side with your knees bent. The nurse will then place the oxygen monitoring probe on your finger, if you have chosen to receive sedation. The drugs will be delivered via a cannula (tube) in a vein and you will quickly become sleepy.
- If you decide to have Entonox, the nurse will show you how to inhale the gas.
- The endoscopist will perform a digital examination of the rectum using gel and finger.
- The endoscopist will then introduce the endoscope into your rectum through the anus. The scope will be navigated into the lower part of the large bowel to reach and visualise the area of interest. At this time, you might feel as if you need to go to the toilet. This is a perfectly natural reaction and there is no need to worry. There may be periods of discomfort but these are usually mild.
- If you find the procedure more uncomfortable than you would like, please let the nurse know and we will give you some pain relief. However, if you make it clear that you are too uncomfortable the procedure will be stopped.
- After the procedure, you will return to the recovery area and your condition will be monitored.

What are the risks of the procedure?

Endoscopic ultrasound is classified as an invasive procedure and therefore has risks of complications. Although these risks occur very infrequently, we would wish to draw your attention to them.

Risks of the TREUS endoscopic examination:

The main risks of any endoscopic procedure are of mechanical damage, such as:

- Perforation (damage to the lining of the bowel) and bleeding (1 in every 5,000 cases). Bleeding can usually be stopped during the procedure; on rare occasions, a patient may bleed severely and a blood transfusion may be necessary.
- Perforations often heal by themselves but, on very rare occasions, an operation is needed which may involve making a temporary opening in the abdomen (called a stoma) to allow the passage of waste.
- If an FNA/B (fine needle aspiration or biopsy) is done, there is a small risk of bleeding or infection (1 in 100 cases), but these can be treated if they arise. Rarely, the biopsy may have an uncertain result when examined by a pathologist and a repeat procedure may be required.

Risks of sedation:

- Sedation can occasionally cause problems with breathing, heart rate and blood pressure. If they occur, they usually only last a short time. You will be carefully monitored by an endoscopy nurse to ensure any problems are identified and rapidly treated.
- Older patients and those with significant pre-existing health problems, for example, people with significant breathing difficulties, may be assessed by a doctor before being treated.

After the procedure

- Unless specifically instructed, you will be allowed to rest for as long as is necessary. You may feel a little bloated and have some wind-like pains because of the air in your gut; these usually settle quickly. Your blood pressure and heart rate will be recorded and if you have diabetes, your blood glucose will be monitored. We will continue to monitor your breathing and can administer additional oxygen if necessary.
- If you **did not have sedation**, you may go home soon after the procedure.
- If you had **Entonox**, we will take you to recovery and ask you to rest for approximately 30 minutes.
- If you had **sedation**, it can take 60 minutes to fully recover from it. It will be necessary to monitor you afterwards to check that there are no immediate complications. Sedation can make you forgetful. If you had sedation, although you may feel fully alert following the procedure, the sedative drug remains in your blood system for about 24 hours and you can intermittently feel drowsy with lapses of memory. If you live alone, you **MUST** have someone to take you home and arrange to be supervised for 8 hours once home.
- Depending upon your individual case, you may be admitted to hospital or you may be allowed home.
- Before you leave the department, the doctor will explain the EUS findings. If you had a biopsy or FNA/B this will usually take 1-2 weeks for results to become available to your medical team. The results of the procedure will be discussed at the relevant multi-disciplinary team (MDT) meeting. These team meetings usually take place once a week.
- Any medication instructions or further procedures required will be explained to you at this point. If you require your escort to be present when findings are explained to you, make a nurse aware of this request.
- You will also receive aftercare advice from your nurse before you leave the department.

Training

Royal Berkshire Foundation NHS Trust Endoscopy Unit has Doctors who are trainee endoscopists. You may be asked if you would be willing to be examined by a trainee doctor endoscopist. All trainees are under the direct supervision of an expert consultant trainer until they are fully competent. With your help it will be possible to train the specialists of the future.

Summary of important information

- **If you are unable to keep your appointment, please notify the Endoscopy Unit as soon as possible on 0118 322 7459.**
- It is our aim for you to be seen and investigated as soon as possible after your arrival. However, the unit is very busy and your procedure may be delayed. If emergencies occur, these patients will be given priority over less urgent cases.
- The hospital cannot accept any responsibly for the loss or damage to personal property during your time on these premises.
- Follow the bowel preparation instructions. If you have not received the preparation, please ring the Endoscopy Unit on 0118 322 7459.
- After the procedure, you may feel a little bloated and have some wind-like pains because of the air in your gut; these usually settle down quickly. If these symptoms persist, please ring the Endoscopy Unit on 0118 322 7459 up to 6pm.
- You can also ring your GP's out of hour's number or ring NHS 111; they can advise if you need to seek immediate medical care or not.
- Alternatively, for out of office hours and weekends, ring Sidmouth Ward on 0118 322 7468, as per the advice leaflet you were given upon discharge.

Royal Berks Charity Gastroenterology Support Fund U200

The Gastroenterology Support Fund was set up with the purpose of providing gastrointestinal services that may not otherwise be available through NHS resources. The Gastroenterology Department carries out many hundreds of complex diagnostic test procedures each year and is one of the most technically advanced departments in the UK.

Nevertheless, much of the equipment and some of the staffing are funded through non-NHS money raised by donations and charitable resources. In Endoscopy, this funding supports specialist nurse training. In order to expand these facilities and to remain up to date with the technological advances that are continually occurring, further donations are greatly needed and appreciated.

Donate today to the Royal Berks Charity Gastroenterology Support Fund and help make a difference.

Contacting us

If you have any questions or need any advice, please do not hesitate to contact the Endoscopy Unit on: 0118 322 7459.

Checklist

Things to remember before your procedure

- ❑ Read the leaflet carefully.
- ❑ If you would like any of this information translated into another language or in large print format, or you need an interpreter at your appointment, please let us know in advance.
- ❑ Note the appointment date in your diary.
- ❑ Wear loose fitting clothing and bring a dressing gown and slippers, if possible.
- ❑ If you are having sedation, you MUST have someone to take you home and have made your own arrangements to be supervised for 8 hours once home, or your procedure will be cancelled.
- ❑ Bring your medications or a repeat prescription with you.
- ❑ Please telephone the Endoscopy Unit, at least 7 days before your procedure, on 0118 322 7459 if you are taking anticoagulants and/or antiplatelet (drugs that affect the blood) such as Warfarin, Clopidogrel, Dabigatran, Rivaroxaban, Apixaban, Edoxaban, Prasugrel, Ticagrelor and Dipyridamole.
- ❑ Bring this leaflet with you to the Endoscopy Unit.

Patient and visitor Park & Ride 300 bus service

If you are coming to the Royal Berkshire Hospital and wish to avoid long waits for parking in the multi storey, please consider using the Park & Ride bus service. Running Monday to Friday between 6am and 7pm, the hospital Park & Ride 300 service links the Royal Berkshire Hospital with the Mereoak and Thames Valley Park & Ride sites. For timetables and more information, visit https://www.reading-buses.co.uk/services/RBUS/300 or call 0118 959 4000.

Ready to use enemas: instructions for use

- One and a half hours (1½) before the appointment, remove bottle from the packet.
- Stand bottle in warm water for 3-4 minutes.
- Remove the protective top.
- Lie on your left side with both knees bent.
- Insert the full length of nozzle into your rectum (back passage). The tip of the nozzle is pre-lubricated.
- Squeeze the bottle until empty.
- **Wait for 5 minutes (still lying on your left side) to allow the enema to work (this is very important).**
- Discard the empty bottle.

- Go to the toilet and open your bowel as fully as you can.
- The effects of the enema may last up to 1 hour during which time you may feel some discomfort.
- If for any reason you feel unable to administer the enclosed enema, it can be administered by a nurse, prior to your procedure in the Endoscopy Unit; however, you will need to arrive an hour before your original appointment time. Please note this will extend the time you will be at the hospital. Please contact the Endoscopy Unit on 0118 322 7459.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

C Chiweshe, Ward Sister, January 2026
RBFT Endoscopy, February 2026
Next review due: February 2028