Colonoscopy/ Flexible Sigmoidoscopy with Endoscopic Mucosal Resection (EMR)
What is a Colonoscopy/ Flexible Sigmoidoscopy and Endoscopic Mucosal resection (EMR)?

Endoscopic Mucosal Resection is usually carried out as part of a colonoscopy or flexible sigmoidoscopy. To do this procedure a colonoscope is passed via the bottom. A colonoscope is a piece of equipment with a long flexible tube the thickness of an index finger with a bright light at the end, which is necessary to view the lining of the bowel. Images seen are transmitted onto a television screen.

The EMR procedure can vary in time depending on the size and position of the polyp. Polyps are abnormal tags of tissue, like warts which are found in the bowel. Some EMR procedures can take over an hour.

The consultant endoscopist will further assess whether EMR is the best way to remove the polyp and if so, will proceed to remove it.

1. A special needle is passed through the colonoscope and inserted under the base of the polyp. Fluid is injected under the polyp which lifts it off the lining of the bowel wall.
2. A wire snare is passed around the raised polyp. The snare is pulled tight and an electric current is passed through the snare which cuts the polyp off and cauterises any blood vessels. If the polyp is very large, it may be removed in a number of pieces in the same way.
3. Once the polyp has been removed, it is retrieved so that it can be sent to the pathology lab for analysis.

Why have I been referred for an EMR?

Some polyps are easy to remove, but in your case, the polyp that has been found is larger than average and requires the EMR technique.

About your appointment

Please be aware that on occasions there can be a slight delay between your nurse admission and the time you have your procedure. The Endoscopy unit often has to deal with emergency cases which may cause delays to your appointment time. The length of time you will be here will vary but may be anything from two to four hours. The person accompanying you is welcome to stay in our waiting area or alternatively we can telephone them when you are ready to be collected. Please note car parking charges are in force. Ask your admitting nurse if you require any further information during your admission check.
Property

Please do not bring valuables to the hospital. We cannot accept any responsibility for the loss or damage to personal property during your time on these premises.

Risks, benefits and alternatives

What are the benefits?

Removal of the polyp will reduce your risk of developing bowel cancer in the future. This also means that surgical intervention may not be required.

Are there any risks?

As with every medical procedure, there are some risks involved. Please be reassured that your doctor would only have recommended an EMR if the benefit to you from the procedure clearly outweighs these small risks. Any complications could mean you need to stay in hospital for treatment. The main risks are:

- **Perforation** – this is a tear in the bowel wall. For EMR, this occurs about once in every 100 patients (1 in 100), with the highest risk when removing large polyps on the right side of the bowel. Some perforations may heal with just antibiotics, but usually an emergency operation is required.
- **Bleeding** – bleeding can occur once in every 100 patients (1 in 100). The bleeding may occur immediately during the procedure, but sometimes occurs up to 14 days afterwards. If bleeding does occur, it frequently stops on its own without intervention. However, very occasionally it requires a blood transfusion or a repeat endoscopy. Very rarely an emergency operation may be required.
- **Incomplete removal** – sometimes the entire polyp cannot be removed completely and may need a further attempt with endoscopy at a later date.
- **Need for surgery** -- if a polyp cannot be removed due to technical reasons or cancer is detected you will require an operation.

Severe complications are rare, but may require emergency surgery, blood transfusion or, in extremely rare circumstances, result in death.

Are there any alternatives to EMR?

The polyp could be removed by having an operation on the bowel. This is usually a straightforward procedure but carries the risk of general anaesthetic and surgical complications such as infection. Sometimes surgery can require the formation of a stoma (bag on your abdomen), although this may only be temporary.

When possible, EMR is considered to be the safest way to remove this type of polyp.
Preparation for the procedure

What preparation is required?

Iron tablets
Stop taking iron tablets 7 days before your appointment.

Diabetic
If you are taking medication or insulin please follow the advice that is attached to your appointment letter.

Medication to thin your blood
If are taking any medication to thin your blood please follow the advice that is attached to your appointment letter.

Things to bring
Please bring a dressing gown and slippers with you and a list of your current medication.

Bowel preparation
To allow a clear view during the procedure the large bowel must be completely empty. Enclosed with this information and your appointment letter is the bowel preparation to be used and instructions on how to take it. Please follow the instructions on the Moviprep AM or PM card NOT the instructions on the Moviprep box. It is important to follow these instructions carefully because otherwise the bowel may not be sufficiently emptied and areas of the colon could be obscured. This may mean having the examination repeated.

OR

You have been sent an enema with clear instructions which will enable you to administer it to yourself at home one hour before your appointment. If you are unable to administer the enema yourself, one of the endoscopy nurses will do it. Please arrive at the unit 1 hour prior to your appointment time and inform the receptionist.

Additional information for people with a colostomy

If you have a colostomy, you may find the bowel preparation easier to manage if you use a drainable colostomy bag before taking any medication until after your investigation. These can be obtained by contacting the stoma care nurses on (01743) 261000 Ext 1144.

Oral contraception
If taking oral contraception, please be aware that your contraception will almost certainly be less effective when taking bowel preparation.
Photographs

We do, sometimes, take photographs of the inside of your bowel during the procedure and these will be kept in your medical records.

Training

The training of doctors and other health professionals is essential to the continuation of the NHS, and improving the quality of care. Shrewsbury and Telford Hospital’s Endoscopy Units are both training units and sometimes deliver National training courses. All trainees are experienced doctors or nurses and the procedure is performed under the direct supervision of an expert consultant or nurse trainer. The trainer is there to ensure your safety and comfort.

You can however, decline to be involved in the formal training of medical and other students; please inform the nursing staff on admission, this will not affect your care and treatment.

Pregnant

Please inform the unit prior to your appointment if you are pregnant.

What happens when you arrive at hospital?

On admission

After admission by reception staff a member of the nursing team will prepare you for your procedure. You will be asked some questions, including your medical history.

Sedation and pain relief

Sedation and pain relief will be offered for your procedure and your choice will be discussed during the admission process. Although we can perform colonoscopy without medication, most patients decide to have pain relief and sedation because it makes the procedure more comfortable and more likely to be successful. The nurse is very aware that you may be worried and anxious so do not be afraid to ask any questions.

Maintaining your dignity during the procedure

Once you have undressed and put on a gown, you will have the option to wear “modesty shorts” which will keep you well covered during your procedure to preserve your dignity.

Consent

The nurse will explain the procedure to you and discuss any potential risks related to the procedure. You will have the opportunity to ask any further questions. You will be asked to sign the consent form by the endoscopist who is performing your test, confirming that you understand and agree to go ahead with the examination. You can change your mind about having the procedure at any time.
The procedure

What should I expect during the procedure?

- You will be collected and escorted into the procedure room where the nurses helping the endoscopist will introduce themselves to you.
- While you are lying comfortably on the trolley, the endoscopist will place a small needle into a vein. If you choose to have sedation and pain medication, this will be given through this needle to keep you comfortable and relaxed, but you will not be completely asleep (this is not a general anaesthetic). Entonox (gas and air) is also available which is administered via a mouthpiece.
- You will be given oxygen through small tubes into your nostrils.
- In order to monitor your heart rate and breathing the nurse looking after you will clip a probe onto one of your fingers.
- The colonoscope will then be inserted into your bottom and air is used to aid viewing. Your bowel is a long tube which naturally bends. As the colonoscope is passed through the bends of the bowel it can be uncomfortable and possibly painful for a short period of time. If you experience any undue discomfort during the procedure, please inform the nurse and it will be addressed by the Endoscopist.
- You may be asked to change position occasionally to help pass the colonoscope around your bowel.
- Once the colonoscope has been passed into your bowel, the Consultant Endoscopist will slowly withdraw the instrument making a close inspection of the lining of your bowel and will further assess whether EMR is the best way to remove the polyp and if so, will proceed to remove it.

1. ![Image 1](image1.png)
2. ![Image 2](image2.png)
3. ![Image 3](image3.png)
4. ![Image 4](image4.png)

- A special needle is passed through the colonoscope and inserted under the base of the polyp. Fluid is injected under the polyp which lifts it off the lining of the bowel wall.
- A wire snare is passed around the raised polyp. The snare is pulled tight and an electric current is passed through the snare which cuts the polyp off and cauterises any blood vessels. If the polyp is very large, it may be removed in a number of pieces in the same way.
- Once the polyp has been removed, it is retrieved so that it can be sent to the pathology lab for analysis.
- We will ensure that you are well covered throughout the procedure to preserve your dignity.
- A nurse will be with you throughout your procedure giving you guidance and support. You may also choose to hold the hand of the nurse.
- The procedure can take up to an hour.
After the procedure

Once completed, the nurse caring for you during the procedure will take you to the recovery area where you will rest until fully recovered. Maintaining the privacy and dignity of our patients is important to us. The recovery area is divided into separate areas for male and female patients. If you have had sedation you will be monitored until you are discharged home. You will be allowed to rest for as long as necessary.

Discharge arrangements

What happens when I am ready for discharge?

The nursing staff looking after you will speak to you prior to discharge. A report of the examination will be given to yourself and a copy sent to your GP. If you have had sedation this can sometimes make you forgetful so please have a responsible adult with you at this discussion. An aftercare sheet will be given to you prior to leaving the unit which will contain all relevant information. The polyp is usually retrieved during an EMR and sent to the pathology laboratory. Results can take a number of weeks to be available.

Please remember: Sedation may affect your judgment and reflexes for the rest of the day. Therefore it is important that you have a responsible adult to take you home following the examination and remain with you for the next 12 hours. You must not drive a vehicle, drink alcohol, operate any machinery or sign any important or legal documents for 24 hours following your procedure.

Contact details for more information

If you are worried or have any questions please do not hesitate to contact us:

- Endoscopy Unit, Royal Shrewsbury Hospital Tel: 01743 261064 / 492395

Further information is available from:

Patient Advice and Liaison Service (PALS)

PALS will act on your behalf when handling patient and family concerns. They can also help you get support from other local or national agencies. PALS is a confidential service.

- Royal Shrewsbury Hospital Tel: 01743 261000 Ext 1691
- Princess Royal Hospital, Telford Tel: 01952 641222 Ext 4382
Useful websites

CORE - Digestive Disorders Foundation

Provides information leaflets on a wide range of digestive disorders. For patient information leaflets, send a stamped addressed envelope stating any information you require to the following address:

CORE, 3 St Andrews Place
LONDON, NW1 4LB
Telephone: 020 7486 0341 (this is not a helpline)
Website: www.corecharity.org.uk

Patient UK

Provides leaflets on health and disease translated into 11 other languages as well as links to national support / self-help groups and a directory of UK health websites.

Website: www.patient.co.uk

Disclaimer

This leaflet is provided for your information only. It must not be used as a substitute for professional medical care by a qualified doctor or other health care professional. Always check with your doctor if you have any concerns about your condition or treatment. This leaflet aims to direct you to quality websites: these are correct and active at the time of production. The Shrewsbury and Telford Hospital NHS Trust is not responsible or liable, directly or indirectly, for any form of damages whatsoever resulting from the use (or misuse) of information contained in this leaflet or found on web pages linked to by this leaflet.

Website: www.sath.nhs.uk

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