

# Advanced Endoscopic Resection of Polyps in the Large Bowel

**This leaflet explains more about the endoscopic removal of polyps in the large bowel, including the benefits, risks and any alternatives and what you can expect when you come to hospital.**

**If you have any further questions, please speak to a doctor or nurse caring for you.**

## Introduction

This leaflet aims to help you understand more about the techniques used to remove large polyps, areas of abnormality or early cancer involving the lining of the gut.

The two main techniques are known as Endoscopic Mucosal Resection (EMR) and Endoscopic Submucosal Dissection (ESD).

This leaflet is designed to be read alongside the general leaflet about colonoscopy / flexible sigmoidoscopy / gastroscopy that will be sent to you before your procedure.

We hope the information presented here will answer some of the questions that you or those who care for you may have. This leaflet is not meant to replace the consultation between you and your medical team but aims to help you understand more about what is discussed.

## What is a polyp?

A polyp is a growth that can develop on the lining of the bowel. If left to grow, polyps can sometimes turn cancerous. By removing polyps your risk of developing bowel cancer is greatly reduced.

## What are ESD and EMR?

ESD and EMR are two different techniques for removal of polyps or early cancers from the lining of the intestinal wall through an endoscope, thereby avoiding the need for surgery. These procedures are primarily used for treatment (by removing polyps), but can also be used for diagnosis by removing and retrieving tissue that can be analysed. If an early cancer is thought to be present within a polyp, ESD can help to determine if the cancer involves deeper layers of the digestive tract, which can then help guide treatment decisions.

## What do ESD and EMR involve?

In both techniques, a thin flexible tube called an endoscope is guided along the digestive tract to find the polyp seen during your previous test. A small amount of fluid is injected under the polyp to lift it away from muscle beneath it, thus creating a safe field to remove it.

In EMR – a wire loop is passed down the endoscope and placed over the polyp. A small amount of electrical current (diathermy) will be passed through the wire loop to cut the polyp while cauterising (sealing) its blood supply. If the polyp is large, these steps may need to be repeated until the polyp is completely removed.

In ESD - special equipment is used to cut around and underneath the polyp or area of concern. It allows for the removal of the abnormal tissue in one piece.

The advantage of ESD over EMR is that it removes deeper layers of tissue which can provide a greater degree of confidence that cancer cells (if present) have been fully removed. However, the ESD procedure usually takes longer to perform than an EMR and has a higher rate of complications.

## Prior to your EMR or ESD

A clear view of the colon is required for this examination to be successful and so your bowel must be as empty as possible. You will have been prescribed either Citrafleet or Moviprep which are laxatives designed to clear your bowel of stool. Please read carefully the instructions provided.

If you are diabetic or taking Warfarin or blood thinning medications such as Apixaban, Rivaroxaban, Dabigatran, Clopidogrel, Ticagrelor or Prasugrel, please contact us on the telephone numbers on Page 5 of this leaflet under Contact us.

Take other medications as normal, except iron tablets or stool bulking laxatives such as Fybogel or Movicol which should be stopped one week before your examination.

If you are taking the contraceptive pill, please take additional precautions for one week following the bowel preparation.

Please do not take oral medications one hour before or one hour after taking the bowel preparation.

Please bring a list of your regular medications and bring with you any inhalers or sprays.

**It is necessary for sedation to be used in this procedure. Please remember to arrange for someone to accompany you home and to look after you overnight. Public transport is not recommended post procedure, it is preferable for your escort to drive or organise a taxi**

**home. Also, please bring an overnight bag with you in case you require admission to the hospital following your procedure.**

## **During your EMR or ESD**

The EMR or ESD procedure can take longer than a standard colonoscopy / endoscopy. This can vary depending on the size and position of the polyp / abnormal area but can take up to several hours. An injection of a powerful painkiller and a sedative injection will usually be offered at the start of the procedure to help make you feel more comfortable.

## **What are the risks of EMR and ESD?**

The risks of EMR and ESD are smaller than the risks of surgery. Although uncommon, the main risks are:

- **Perforation** – This means making a hole through the wall of the digestive tract. With EMR, this can occur about once in every 100 patients and, with ESD, this can occur about once in every 50 patients. Sometimes perforations can be treated at the time of the endoscopy usually combined with a short course of antibiotics, but occasionally an emergency operation is required.
- **Bleeding** – Minor bleeding is seen commonly during and rarely after, EMR or ESD procedures and is most often able to be identified and treated at the time of endoscopy. Bleeding can occur up to 14 days after the procedure and usually settles on its own. About once in every 100 patients, bleeding is more significant and may require a blood transfusion or a further endoscopy to assess and treat the site of bleeding. Very rarely, an emergency operation may be required to stop it.
- **Incomplete polyp removal** – Sometimes, it is not possible for the endoscopist to remove the entire polyp for technical reasons. If this happens, further endoscopic resection or an operation might be planned at a later date.
- **Narrowing of the large intestine** - Removing large rectal lesions can lead to scarring that narrows the large bowel. It may lead to difficulty in opening the bowels and may require further treatment. This is a very rare complication and is usually amenable to medicine to soften the stool or stretching of the area if required through the endoscope (colorectal dilatation).

## **What happens if the endoscopist does not think that ESD is possible?**

Even if you have been scheduled for an EMR or ESD procedure, the endoscopist may (after careful assessment of the polyp) determine that it is not safe or possible, to proceed with the polyp removal. If this is the case, the doctor will discuss whether you need to have an operation or an alternative procedure to remove the polyp or abnormal area.

## **Are there other options?**

Yes. There are two other options:

1. Do nothing – leave the polyp or abnormal lesion alone. However, the risk is that larger polyps are at greater risk of turning cancerous if they are left to grow.
2. Remove the polyp or abnormal area by having a surgical operation to remove the section of bowel in which the polyp is located. This carries the risk of general anaesthetic and wound infection and will leave a scar on the abdomen. Sometimes surgery can require the formation of a stoma (bag on your abdomen), although this may only be temporary. If you are considering an operation, further details will be provided by the surgeon undertaking it, who will discuss the risks and benefits in greater detail with you.

## After your procedure

You will be able to rest in the recovery room until the immediate effects of the sedation have worn off. Most patients can go home the same day, provided they are feeling well, are accompanied home by a family member or friend and have a responsible adult staying with them for that day and overnight.

Sometimes, for example if the polyp was very large, or your procedure was prolonged, or if you live a long way away from the hospital, the consultant might advise that you stay in hospital overnight as a precaution. Please be aware that you will be required to be admitted to the hospital overnight after your procedure if you are not able to be accompanied home. You **MUST** make us aware if this is likely to be the case well in advance of your procedure, so that the necessary arrangements can be made.

## What should I look out for after the procedure?

Immediately after the procedure, you may experience trapped wind. This usually passes over the next 24 hours. It can be eased with peppermint capsules or peppermint tea. Occasionally you can feel faint or sick. This usually passes during your recovery period in the endoscopy unit. If you develop any of the symptoms listed below after you have left the endoscopy department, please seek medical advice immediately by either contacting the Advanced Endoscopic Therapy Nurse (**Monday to Friday, 9am – 5pm, see below for contact details**) or go to the nearest Accident and Emergency Department (A&E). If you live far from the hospital, please seek emergency advice by reporting directly to your local A&E department. Please take with you a copy of your endoscopy report.

The symptoms to look out for include:

- Fever
- Chills
- Bowel motions containing large amounts of blood or clots
- Abdominal pain
- Shortness of breath
- Fainting.

## Will I have a follow-up appointment?

The tissue that has been removed will be sent for analysis. It usually takes from one to three weeks for the tissue to be analysed and reported. If further action is required based on the analysis of the tissue obtained, we will contact you with the next steps.

A repeat follow-up procedure is usually required to assess the area where the polyp / abnormal tissue was removed and this will be documented on your endoscopy report. An appointment will be sent out to you accordingly but if you do not receive this within the expected timeframe, please contact the Endoscopy Department (contact details below).

## Where do I go?

Please see your appointment letter for the location of your appointment and the hospital address below:

St George's Hospital, Blackshaw Road, London, SW17 0QT. Please go to the Endoscopy Unit, First floor, St James' Wing.

## Is there parking at the hospital?

At St George's Hospital, the car park entrance is located on Blackshaw Road.

## Contact us

If you wish to discuss the EMR or ESD procedure with someone, or if you have any further questions, please contact:

Advanced Endoscopic Therapy Nurses  
Endoscopy Department, St James Wing  
St George's Hospital  
Telephone: 020 8725 1682 / 4311  
Monday to Friday, 9am to 5pm

Endoscopy Department  
St George's Hospital  
Telephone: 020 8725 1913 / 1491  
Monday to Friday, 9am to 5pm

**For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)**

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

### AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://www.accessable.co.uk)). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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