

Endoscopic mucosal resection (EMR)

Information for patients attending King's College Hospital only

This information leaflet answers some of the questions you may have about having an endoscopic mucosal resection (EMR). It explains the risks and the benefits of the procedure and what you can expect when you come to hospital. If you have any more questions, please do not hesitate to contact a member of staff.

Endoscopy Unit

Denmark Hill Nurses' Station	020 3299 4079
Denmark Hill Reception	020 3299 3075

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

What is an endoscopic mucosal resection (EMR)?

It is a procedure we use to remove polyps, small wart-like growths that sometimes form on the lining of your bowel.

The first part of the procedure is the same as having a colonoscopy. It involves passing a long, thin, flexible tube called a colonoscope into your back passage (anal canal) and higher up into your rectum and colon (large bowel). The colonoscope is a bit thicker than your little finger and has a light and a camera in its tip which sends video images to a monitor screen.

A needle knife is then passed through the colonoscope. The needle knife is heated with a low electrical current (diathermy) and used to lift and remove the polyp and seal the area left behind.

You usually have this as an outpatient procedure so you will be able to go home the same day once the effects of the sedative have worn off.

Why do I need an EMR?

If left to grow, polyps can sometimes turn cancerous. By removing any polyps, your risk of developing bowel cancer is greatly reduced. Some are easy to remove but in your case the polyp is flat or larger than average. An EMR is the simplest and most straightforward way of removing this sort of polyp.

What are the benefits?

By removing polyps, your risk of developing bowel cancer is greatly reduced. It is not possible to remove larger than average or flat polyps in the same way as smaller polyps or those with a stalk. Where an EMR procedure can be performed, the need for surgery is avoided.

What are the risks?

The risks of bleeding and perforation are higher with an EMR than standard polyp removal using snare polypectomy. How likely you are to have certain complications depends on the size and position of your polyp.

Minor complications

- **Bloating** – this is caused by trapped wind. You may also feel faint and dizzy, have cold sweats and feel sick. These usually ease very quickly. The bloated feeling may come and go over the next few days but it should settle.
- **Bleeding** – you may have bleeding from your bottom (anus). This is caused by the colonoscope rubbing against your anus (which has a good blood supply) or against piles (haemorrhoids). You may see spots of blood on toilet paper or drops of blood in the toilet. This should ease in a day or two.
- **Blue dye** – you may see this the next time you go to the toilet if it is used during your procedure.

Major complications

- **Bleeding** – there is a 1 in 100 risk of bleeding. This can happen during the procedure and can also happen a few weeks afterwards. It usually stops on its own but occasionally you may need to stay in hospital, have a blood transfusion or need more treatment. After having a polyp removed you will have a little bleeding such as spotting on toilet paper or small drops in the toilet bowl. This usually stops quickly. If the bleeding gets worse or you see large blood clots and you begin to feel unwell or faint you must attend Accident & Emergency.
- **Perforation** – there is a 1 in 100 risk of making a perforation (small hole) in your bowel wall. This can happen during the procedure or a few weeks afterwards. If this happens you may need surgery to repair your bowel. This sometimes means you need a stoma, although this can be temporary.

If you begin to feel unwell – hot and shivery, feel sick or vomit, your tummy becomes hard, swollen and painful – you must seek medical advice immediately as these are symptoms of a perforation.

Do not travel abroad within **two** weeks of having an EMR. If you have any travel plans, please discuss them with us.

- **Incomplete removal of the polyp** – we are not always able to remove the polyp in one procedure so you may need to have another EMR. If this happens we will see you in the clinic to discuss alternatives.
- **Sedation** – this is usually a mix of a painkiller and a sedative, both of which can have an effect on the heart and lungs. Some people can be particularly sensitive to these drugs and can breathe too shallow and slow. If this happens, we stop the test and give you antidotes to the drugs to reverse their effects. In some people with serious heart or lung problems these drugs can cause them to stop breathing or their heart to stop beating. This is a very rare but serious complication and they will need to be resuscitated and admitted to hospital.

Are there any alternatives?

- **Do nothing** – if left in place the polyp can keep growing and may turn cancerous, so we do not usually advise you do nothing.
- **Remove the polyp by having an operation** – this carries the risks of having general anaesthesia and an operation. Your surgeon will discuss these with you.

Consent

We must by law obtain your written consent to any procedures beforehand. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to ask to speak with a senior member of staff.

Do I need to prepare for the EMR?

We need to get a clear view of the inside of your colon so it must be as clean as possible. You need to take a laxative beforehand to prepare your bowel. Please read our advice sheet, *Preparing for your colonoscopy*, which explains how and when to use the laxative. If you have not received this, please follow the instructions which come with the laxative or ring the Endoscopy Unit for a leaflet.

Do I need to stop taking my medication?

If you take warfarin, aspirin or clopidogrel, please ring the Endoscopy Unit Nurses' station for advice on **020 3299 4079** at least one week before your test. You may need to stop taking these before your test, but we need to make sure you do so safely.

If you are diabetic, please read our advice sheet, *Preparing for your colonoscopy – information for patients with diabetes*. If you have not received this, please ring Endoscopy Unit Reception on **020 3299 3075** and we will send you a copy.

If you are taking any other medications, including for diabetes, in general you can take these as usual, unless your doctor has advised otherwise.

Things to remember

- Please bring your reading glasses as you will need to read and sign your consent form. You may also want to bring something to read while you wait.
- You will need to change into a hospital gown for your test, so you may want to bring a dressing gown and slippers to wear for walking to the toilet.
- Please do not bring children with you unless there is someone to look after them. We do not have any childcare facilities in the unit.
- **We cannot take responsibility for any valuables, but your things will be kept with you (on a shelf on the examination trolley) at all times.**

What happens when I arrive for my test?

Your appointment time is approximate. You should plan to be in the Endoscopy Unit for the whole morning or afternoon.

A nurse will fill out an assessment form with you if you have not already done so. The endoscopist who is going to do the test will come and explain the procedure to you.

Do I need to have a sedative?

Most people need or prefer a sedative or pain relief medicine. It relaxes you but you do not go to sleep and you are not unconscious. You will still be able to feel the endoscope being passed around your bowel. You should still be able to talk to the staff during the test, tell them how you are feeling and see the video screen if you wish.

If you have a sedative, someone must come to collect you and take you home afterwards – not a taxi. We cannot give you the sedative unless you arrange to be collected.

After the sedative, you will feel drowsy for a while, so you should not drink alcohol, drive or use machinery for 24 hours after the test.

What happens before the test?

We will ask you to put on a hospital gown, remove your underwear and if available, put on modesty shorts in a changing cubicle. We will then make you comfortable on an examination trolley.

A nurse or doctor will put a cannula into your arm or hand. This is a very thin plastic tube through which they can give you the sedative injection. You will be taken into the endoscopy room lying on the trolley.

A nurse will attach a monitor to your finger to measure your oxygen levels during the test and you will be given oxygen through nose prongs. They will also attach a blood pressure monitor if you have a sedative. You will then be given the sedative injection through the cannula.

A nurse will be with you at all times during your procedure to reassure you and talk you through what is happening.

What happens during the procedure?

This test is similar to having a colonoscopy. Once you are ready, the endoscopist will put the colonoscope into your rectum and move it along the length of your colon until they reach the polyp that needs to be removed.

They may ask you to change position to:

- make you more comfortable
- make it easier to pass the colonoscope around your bowel

- and/or ensure they can see as much of the inside lining of your bowel as possible.

The endoscopist will gently pump carbon dioxide gas into your bowel so they can get a good view of the polyp while they are taking it out. You may feel wind or cramps during the procedure and perhaps the occasional twinge as the colonoscope is pushed around bends. It should not be painful. If it is, please tell the endoscopist. They can give you medication to ease the pain or change what they are doing.

The endoscopist may spray blue dye onto the polyp. This outlines the edges of the polyp and helps them to remove it completely. The dye may stain your stool blue or turn your urine blue for about 48 hours.

The endoscopist next injects a small amount of fluid under the polyp to lift it away from the deeper muscle layers of your bowel wall. This helps them to identify polyps that can be removed in this way. It also makes it more likely that they can remove the whole polyp as well as reducing the risk of complications.

They then pass a wire loop through the centre of the colonoscope and over the polyp that is going to be removed. A low electrical current is passed through the wire (diathermy) to remove the polyp and seal the area left behind.

How long does the procedure take?

A standard colonoscopy takes 30 – 45 minutes but the EMR will take longer, depending on the size and position of your polyp.

What happens after the procedure?

If you have had a sedative, you will need to stay until it has worn off. This usually takes at least 30 – 45 minutes. Sometimes the endoscopist may ask you to recover for longer than this before going home.

When will I get my results?

The polyp is sent to a laboratory to be checked by a specialist. They will send their findings to your endoscopist.

We will make an appointment for you to see your endoscopist in the outpatient clinic after the procedure, to give you the results of the procedure and discuss any follow-up treatment you may need. You usually have another colonoscopy procedure about three months after the EMR to check that the polyp is all gone, but this depends on the laboratory results.

Who can I contact with queries and concerns?

If you have any questions, such as what to do about medication, before or after your test, contact the Endoscopy Unit Nurses' Station.

Tel: **020 3299 4079**, 9am – 5pm, Monday to Friday

If you want to change your appointment or need another information leaflet, contact Endoscopy Unit Reception.

Tel: **020 3299 3075**

At all other times, if you have any concerns after your procedure, call your GP or local Emergency Department (ED/A&E).

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our

patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between hospitals.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is on the ground floor of the Hambleden Wing, near the main entrance on Bessemer Road – staff will be happy to direct you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at www.kch.nhs.uk/contact/pals

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.