



The Leeds  
Teaching Hospitals  
NHS Trust

Endoscopy Unit

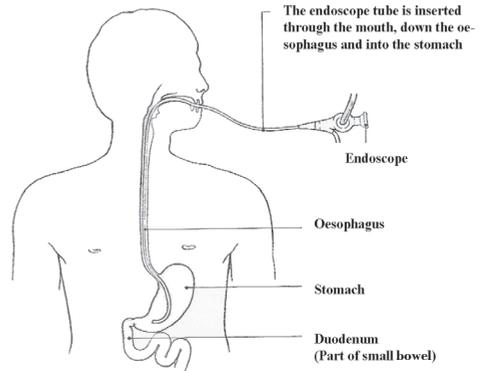
# EMR of the digestive tract

Information for  
patients

Your doctor has recommended that you have an **EMR** of an area in the digestive tract. This leaflet will explain the procedure and what to expect on the day of your test. If you have further questions, please telephone the department or discuss them with a member of staff on the day of your procedure.

### What is an EMR?

This is a procedure where a lesion (growth) is removed. This may be from your oesophagus (gullet), stomach or duodenum (small bowel). The procedure will be carried out using a gastroscope (camera). When the lesion has been located with the gastroscope it is raised using an injection of fluid. This injection makes it easier for the lesion to be removed. The lesion is removed by diathermy (heat treatment), you will not feel the lesion being removed.



## Why am I having an EMR?

Your previous endoscopy has found a lesion in your oesophagus, stomach or duodenum (small bowel). In most cases, biopsies (small samples of tissue) have already been taken and sent to the laboratory for analysis. Sometimes, these samples are too small for the laboratory to make a diagnosis and a larger sample is required for a more precise diagnosis. Alternatively, the previous biopsies have indicated that the lesion may require removal. Provided that the lesion is superficial it may be possible to remove the lesion via the endoscope, without the need for a major operation. This is called an "Endoscopic Mucosal Resection" or EMR for short.

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 biopsies with the doctor who referred you.

## What are the benefits and alternatives to having an EMR of the digestive tract?

The benefit is that lesions can be removed without resorting to an operation. In many cases, patients are not usually required to stay in hospital and have much less discomfort than after an operation.

The alternative treatments may already have been discussed with you. They usually include removing the lesion surgically, or to keep the lesion under periodic review.

## Will I need to stay in hospital after my EMR?

The doctor doing your EMR will have decided if you will need to stay in hospital after your EMR. Often the size and position of the lesion will determine if you need to stay in hospital. You should expect to stay in hospital overnight, this is only for observation and to ensure that you have no problems after the removal of your lesion.

Your appointment letter will inform you if you have to stay in hospital. If you do, you should arrange for someone to collect you from the ward the following day.

If you are **not** staying in hospital, you **must** bring someone with you and **must** also go home in a car / taxi (not public transport) as you may be unsteady on your feet after sedation. You **must** also have someone at home to care for you for 24 hours and must rest indoors. This means no work, no driving, no alcohol and you should not operate machinery. Sedation will **not** be given if the above are not arranged prior to the test.

If you are not staying in hospital and are unable to make the arrangements required for sedation, please contact the endoscopy unit for advice.

## What are the risks of having a EMR?

The most common risk of an EMR is having a sore throat. There are rare reactions to the drugs used or occasional damage to crowned teeth and bridgework. In addition to these, the two more serious risks are bleeding and perforation (tearing) of the gut wall. The risk of this happening is dependent on the size and location of the lesion that being removed.

Bleeding is usually minimal unless you take medication to stop clots from forming. Examples of such medication would include Warfarin, Sinthron (Acenocoumarol) or Phenindione. Other medication which may cause bleeding includes Aspirin taken together with a second Aspirin-like tablet such as Plavix (Clopidogrel), Dipyridamole (Persantin) or Asasantin.

In most cases, bleeding, following your EMR will settle on its own without treatment. If the bleeding does not stop, it can be managed endoscopically (through the camera) without resorting to an emergency operation. If there was bleeding, you would be advised to stay in hospital for an extra few days to make sure that the bleeding does not re-start. Late bleeding can happen for up to a few weeks after the procedure; see the end of this leaflet for how to recognise late bleeding following your EMR and what to do.

If during the procedure, your gut wall is perforated, this can be managed in two ways:-

1. It may be possible to close the perforation endoscopically in which case you would be managed by intravenous fluids and nutrition together with antibiotics for at least 1 week
2. An emergency operation would be required to surgically repair the perforation.

A recognised late complication is stricturing (narrowing) after EMR in the gullet. This usually begins to develop about 2 weeks or more after the procedure. The usual sign is that swallowing becomes difficult with occasional vomiting. Please contact your consultant or endoscopy unit if you develop difficulties in swallowing. Strictures can usually be stretched up endoscopically as an outpatient procedure without the need to be readmitted to hospital.

## What preparation will I need?

An EMR **must** be performed on an empty stomach, your appointment letter will tell you when you will need to stop eating and drinking.

## Do I keep taking my tablets?

You must keep taking any essential tablets **unless your doctor tells you specifically not to**. Please take your tablets early morning with a sip of water for a morning appointment. If you have an afternoon appointment, please take your medicine 4 hours before your appointment or leave it until after your test.

- Please telephone the endoscopy unit if you are **diabetic**, have **sleep apnoea** or are taking tablets that prevent blood clots. Examples of blood thinning tablets are Warfarin, Aspirin, Clopidogrel (Plavix), Dipyridamole (Persantin), Prasugrel (Efient), Tigrator (Brilligie) or Acenocoumarol (Sinthrome)

## What should I bring on the day?

Please bring a list of medication that you take and also any medication that you may require whilst in the department such as GTN spray, inhalers and insulin. Please **don't** bring valuables to the department or wear lots of jewellery. Please can you also ensure that you remove **nail varnish** as this interferes with the signal we receive from our monitors about your oxygen levels. If you are staying in hospital, please bring an overnight bag and any medication that you take with you.

## Will I be asleep for my EMR?

EMR's of the oesophagus, stomach or duodenum are usually carried out with sedation which means that you will be relaxed but not asleep. In addition we offer a local anaesthetic spray to reduce any discomfort from your throat. In most cases it is possible to carry out an EMR with sedation, however, as the removal of large lesions can take up to 1 hour and be uncomfortable some lesions are removed under general anaesthetic.

Your appointment letter will inform you if a general anaesthetic has been arranged for your procedure.

If you would like sedation and are not staying in hospital, **you must bring someone with you, and also go home in a car / taxi**, not on public transport as you may be unsteady on your feet due to the sedation. You **must** also have someone at home to care for you for 24 hours and must rest indoors. This means no work, no driving, no alcohol and you shouldn't operate machinery. **Sedation will not be given if the above are not arranged prior to the test.** If you are unable to make these arrangements, please contact the endoscopy unit for advice.

## What will happen on the day of the test?

When you arrive at reception in the endoscopy unit your personal details will be checked. The assessment nurse will collect you and take your medical history, discuss and explain the test and take your blood pressure and pulse. You will be able to ask any questions and discuss any worries or questions that you have about the test.

You will be asked for your consent form (supplied with this leaflet). This will be attached to your notes and taken to the procedure room. Please make sure that you have read this through before you come for your test as when you sign this form you are agreeing that this is a test you want - remember, you can change your mind about having this procedure at any time. The endoscopist will discuss the consent form with you.

If you are staying in hospital after your EMR there may be a wait before your procedure as we will need to confirm that a bed is available for you afterwards. The nursing staff will keep you informed about when a bed may be available for you.

**Please note:** every effort will be made to see you at your appointment time, however, due to hospital inpatient emergencies delays may occur. The endoscopy staff will keep you informed of any delays.

## What happens in the procedure room?

You will be greeted by two nurses who will remain with you during the test. A cannula will be placed in your vein so that sedation or anaesthetic can be administered, you will be given oxygen through a small plastic tube in your nose, and your throat will be numbed with an anaesthetic spray. You will then be asked to remove any dentures or glasses and lay on a trolley on your left hand side. All patients pulse and oxygen levels are monitored by a probe placed on your finger during the test. Before the test starts a plastic mouthpiece is placed between your teeth to keep your mouth slightly open.

When the endoscopist gently passes the endoscope through your mouth you may gag slightly - this is quite normal and will not interfere with your breathing. During the procedure air is put into your stomach so that the endoscopist can have a clear view. This may make you burp a little, some people find this uncomfortable. Most of the air is removed at the end of the test. When the procedure is finished the endoscope is removed quickly and easily.

**Please note:** all hospitals in the trust are teaching hospitals and it may be that a trainee endoscopist performs your procedure under the direct supervision of a consultant or registrar.

## What happens after the test?

You will be transferred to the recovery room after the test. The length of your stay is dependant on how you recover from the procedure and from the sedation you have been given. The nurse in the recovery room will monitor you during this period.

If you are staying in hospital after your EMR you will be transferred to the ward when you have recovered, if not, you will be allowed home when the nurse in recovery is happy with your progress.

Most patients feel some discomfort in the chest or upper abdomen for a few s after the procedure. In spite of this, most patients will be able to have a light meal and can restart most medication immediately after the procedure.

Provided that you are comfortable without pain or nausea, you will be discharged home.

**Remember:** if you have sedation you will need an escort with you, transport home and someone to look after you for 24 hours after the test; you must not:

- Drive a vehicle
- Drink alcohol
- Operate machinery
- Sign legal documents
- Go to work

**This applies for sedation only**

The recovery nurse will prepare you for discharge home and give you aftercare instructions.

## When will I get my results?

A full report of your test will be sent to your own consultant and GP on the day of the procedure. We will also offer you a copy of your endoscopy report.

In most cases, we would recommend a follow-up endoscopy around 6 months after the procedure to confirm that the lesion has been completely removed. This procedure may be carried out in your local hospital or in Leeds.

## What should I do if I become unwell after the procedure?

Bleeding or perforations can occasionally present several days after the procedure took place. If you experience any unusual pains in the abdomen, not relieved by passing wind, nausea, vomiting or a bleeding following your procedure, you should go to the nearest hospital A&E department, bringing a copy of your endoscopy report.

For further information or advice during office hours, please contact us on one of the direct numbers below (Monday to Friday, 9.00 am to 5.00 pm). For advice, outside of normal office hours you should contact your GP or the agency providing out of hours care on behalf of your GP.

## Contact numbers

### LGI Endoscopy

Telephone: **(0113) 392 8675**

### St. James's Endoscopy

Telephone: **(0113) 206 8279**

This leaflet has been designed as a general guide to your test. If after reading this you have any questions that you feel have not been answered, please contact the endoscopy department on the numbers below.

**Administration Team:** for any enquiry about your appointment including cancellation. Also, contact this number if you require an interpreter or transport.

Telephone: **0113 392 8672**

**Monday - Friday, 9.00 am - 4.00 pm**

**Nursing Team:** please contact this number if you would like advice on your medication, or any other medical question or worry.

Telephone: **0113 392 2585**

**Monday - Friday, 9.00 am - 4.00 pm**