Endoscopy Department

Gastroscopy with Endoscopic Mucosal Resection (EMR)

Important information

Before your appointment

• All medications should be taken as normal with a little water.
• If you take Warfarin or Clopidogrel or other anticoagulant medication please read the ‘Alert’ on page 2 as you will have to stop these medications prior to the procedure.
• If you have diabetes please read the advice on page 6 and 7.
• If you have any questions about the procedure or find that you cannot keep this appointment, please contact the endoscopy Office between 09:00 and 17:00 Monday to Friday on 01223 257080.

On the day

• Have nothing to eat for six hours and nothing to drink for four hours before your appointment.
• You must have someone to take you home.

At the hospital

• Please come to the Endoscopy Department on level 3 of the Addenbrooke’s Treatment Centre (ATC).
• Use the ‘Car Park 2’. Take your parking ticket and appointment letter to the ATC reception desk to obtain discount parking.
• Please note that the appointment time is for your pre procedure check, not the time of your examination. The length of time you will be here will vary enormously but expect it to be anything from two to four hours or more. Please ask your admitting nurse for further information during your admission check.
**Alert for endoscopy patients on Warfarin or Clopidogrel or other anticoagulant medication**

You **must** read this guidance **before** your procedure.

**If you have any questions or do not know whether to stop your medication before your Endoscopy please phone 01223 216515**

<table>
<thead>
<tr>
<th>Warfarin: for patients advised to continue medication</th>
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<tr>
<td>• You should have an <strong>INR test seven days</strong> before the endoscopy.</td>
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<tr>
<td>• If that <strong>INR result is 3.0 or less</strong>, continue with your usual daily Warfarin dose.</td>
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<tr>
<td>• If that <strong>INR result is more than 3.0</strong>, ask your supervising anticoagulant service for advice to <strong>reduce your daily Warfarin dose</strong> so that your INR is 3.0 or less when you have the endoscopy.</td>
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<thead>
<tr>
<th>Warfarin: for patients advised to stop medication</th>
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<tr>
<td>• You should <strong>stop Warfarin five days</strong> before the endoscopy.</td>
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<tr>
<td>• After the endoscopy go back to your usual daily dose as soon as you are eating again (that will usually be the same evening).</td>
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<tr>
<td>• You should have your INR checked one week later to ensure you are adequately anticoagulated again.</td>
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<td>If you have:</td>
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<td>• metal mitral valve</td>
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<td>• metal valve + previous stroke/thrombosis</td>
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<td>• valvular heart disease</td>
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<tr>
<td>You may need Heparin injections instead of Warfarin. Please contact the endoscopy department on 01223 216515.</td>
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<th>Clopidogrel: for patients advised to continue medication.</th>
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<tr>
<td>• Continue with your usual dose.</td>
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<td>• You should stop <strong>Clopidogrel seven days</strong> before the endoscopy.</td>
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**Other anticoagulant medication:**
Acenocoumarol, sinthrome, phenindione, dindevan, rivaroxaban, dabigatran, dalteparin, enoxaparin: If you are taking any of these please contact the endoscopy department 01223 216515.
About endoscopic mucosal resection (EMR)
Endoscopic mucosal resection is the name given to a procedure where specialised endoscopic devices are used to remove abnormal areas in the lining of the oesophagus (gullet) or the stomach.

Is endoscopic mucosal resection (EMR) widely used?
Endoscopic mucosal resection has been used for many years in Japan and the Far East for the treatment of early stomach cancer. The techniques are now increasingly widely used in Europe and the UK.

What is the aim of endoscopic mucosal resection (EMR)?
EMR allows us to remove larger areas of the gullet or stomach lining than standard endoscopic biopsy samples. This allows us to obtain larger pieces of tissue for analysis under the microscope and help us plan further treatment as necessary. EMR can also be a therapeutic intervention when the whole of the abnormal area is removed with the endoscopy.

Who is suitable for endoscopic mucosal resection (EMR)?
All patients who have conditions potentially suitable for EMR are discussed in a multidisciplinary meeting. At this meeting, specialists in a number of different fields discuss the best treatment options for each individual patient.

Patients with small polyps in the gullet and stomach or abnormal areas detected using other methods are potentially suitable for EMR.

What are the alternatives to endoscopic mucosal resection (EMR)?
The current alternatives to EMR techniques include for small areas laser beams (APC) to destroy (ablate) the lining of the gullet or stomach and surgery.

What does the procedure involve?
Endoscopic mucosal resection is performed under sedation. You can also be offered anaesthetic throat spray so that you are as comfortable as possible during the procedure.

In the procedure room, you will be asked to remove false teeth, glasses, hearing aids in the left ear and made comfortable on a couch lying on your left side. We will also need to place a sticky pad on your right hip, which is part of the cauterizing device. For your comfort and reassurance, a trained nurse will stay with you throughout the procedure.

An intravenous injection is given into a vein to make you feel relaxed and sleepy, but not unconscious (this is not a general anaesthetic). This will be used to give you two sedative medications during the procedure.
When you are sleepy, the endoscope is passed down your gullet to look carefully at the area to be treated in the gullet or in the stomach. Once the area has been assessed and we have confirmed it is suitable to carry out EMR, the area to be treated will be marked using a cautery device (also called a ‘snare’) passed down through the endoscope.

The endoscope will then be removed and the device for performing the EMR will be attached to it. The endoscope is then passed back down your gullet and the EMR performed. When this is finished, it is necessary to retrieve the tissue pieces we have removed from the lining. In order to do this, we first take out the endoscope and remove the EMR device. The endoscope is then passed down the gullet again and a special net passed through the endoscope that allows us to collect and remove the tissue pieces.

**How long does the procedure take?**

This depends on the amount of the gullet we are treating. On average, the procedure will take about 20 to 30 minutes. We will ensure you receive adequate sedation for the whole time the procedure takes. Minimal restraint may be appropriate during the procedure. However if you make it clear that you are too uncomfortable the procedure will be stopped.

**Who will perform my procedure?**

This procedure will be performed by a consultant who has been trained in endoscopic mucosal resection and is experienced in specialist endoscopy techniques.

**After the procedure**

We will take you to a recovery area while the sedation wears off. We will always do our best to respect your privacy and dignity, for example with the use of curtains. If you have any concerns, please speak to the department sister or charge nurse.

You must arrange for a responsible adult to come with you and wait to take you home. You will not be able to drive yourself. **If you come without an escort, we will have to cancel the procedure.** If you are using hospital transport, an escort is not required.

When you are sufficiently awake, we will give you a drink, you can then go home. We advise you not to drive, operate machinery, return to work, drink alcohol or sign any legally binding documents for a 24 hour period. You are also advised to have a responsible adult stay with you for the next 12 hours.

- **Eating and drinking:** After the procedure, you should drink liquids only for the following day. These liquids (this does include soup) should not be too hot or too cold – around room temperature is the best.
- After 24 hours, we recommend you begin taking soft, sloppy foods and continue with this for the next five days.
• You should remain on your acid reducing medication continuously and you can be advised to double the dose for the week following the procedure and introduce other medication to improve the healing of your stomach or gullet lining.
• You can also take simple ‘over the counter’ indigestion remedies.
• After endoscopic mucosal resection, you may notice some after effects for as long as 10 to 14 days.
• These effects most commonly consist of mild chest discomfort (like heartburn) and mild discomfort when you eat food.
• Paracetamol should be sufficient to relieve this discomfort.
• You should not take Aspirin or other non-steroidal painkillers (such as Ibuprofen or Diclofenac).

If you experience any of the following contact your GP, the endoscopy Department 01223 216515 or the Accident and Emergency Department 01223 217118:
• Severe pain,
• Black tarry stools
• Persistent bleeding

When do I know the result?

The endoscopist will tell you the results immediately after the procedure. As you have had sedation, it is a good idea to have someone with you when you talk to the endoscopist because the sedation can affect your ability to remember the discussion.

You will be informed of the results of the analysis performed on the tissue we remove at an outpatient appointment or with a telephonic consultation depending on your preference. At this time, we will also discuss with you our recommendations about further treatment you may require.

Serious or frequently occurring risks

• Endoscopic mucosal resection is a safe procedure and serious complications are very rare.
• The major risks are perforation (tear through the wall of the gullet or stomach) and bleeding and both are potentially serious. We estimate that these complications may occur in 2 to 3% of people who undergo EMR.
• Other rare complications include aspiration pneumonia (inflammation of the lungs caused by inhaling or choking on vomit) and an adverse reaction to the intravenous sedative and analgesic drugs.
• If we are concerned a complication has occurred during the procedure, you may be kept in hospital for observation.
• When you go home, you should contact us if you experience any of the following:
  o Chest pain
  o Great difficulty swallowing
  o Shortness of breath
  o Fever
  o Abdominal pain
  o Bleeding
Information and support
You might be given some additional patient information before or after the procedure, for example: leaflets that explain what to do after the procedure and what problems to look out for. If you have any questions or anxieties, please feel free to ask a member of staff.

Gastroscopy and EMR Morning Appointment
Please follow these instructions if you have diabetes which is controlled with insulin or tablets.
If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078.

Food and Drink
- Do not eat for six hours prior to your appointment
- Do not drink for three hours prior to your appointment
- Test your blood glucose regularly. If it drops below 4, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml, until your level is 5.
- After your procedure you may eat and drink normally unless specifically told otherwise

Insulin and Tablets: please adjust your normal insulin and tablet doses as instructed below

If you take insulin once daily
- No change to insulin dose necessary

If you take insulin twice daily
- Do not have your morning insulin. Bring it with you, plus something to eat
- If you are able to eat before 11:00, have your normal morning dose with food
- If you are able to eat after 11:00, have half your normal morning dose with food
- Have your normal evening dose

If you take insulin four times daily
- Do not have your morning insulin. Bring it with you, plus something to eat
- If you are able to eat before 11:00, have your normal morning dose with food
- If you are able to eat after 11:00, omit your breakfast dose and have your normal lunchtime dose with food
- Have your normal tea time and bedtime evening doses

If you take tablets for diabetes
- Do not have your morning diabetic tablets
  After your procedure, re-start your tablets at the next dose time
Gastroscopy and EMR Afternoon Appointment

Please follow these instructions if you have diabetes which is controlled with insulin or tablets.
If you have any questions related to your diabetes during this preparation, please contact your GP or the diabetes specialist nurse on 01223 245151 bleep 152078.

Food and Drink

- Do not eat for six hours prior to your appointment
- Do not drink for three hours prior to your appointment
- Test your blood glucose regularly. If it drops below 4, please treat with a sugary drink such as lucozade 100ml, apple or grape juice 200ml until your level is 5.
- After your procedure you may eat normally unless specifically told otherwise.

Insulin and Tablets: please adjust your normal insulin and tablet doses as instructed below

If you take insulin once daily

- No change to insulin dose necessary

If you take insulin twice daily

- Have your normal morning insulin dose unless your breakfast is smaller than usual. If so reduce your normal dose by half.
- Have your normal evening dose

If you take insulin four times daily

- Have your normal morning insulin.
- Do not have your lunchtime insulin
- Have your normal tea time and bedtime evening doses

If you take tablets for diabetes

- Do not have your morning diabetic tablets
- After your procedure, re-start your tablets at the next dose time
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history
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