Endoscopy Department

Gastroscopy with radiofrequency ablation (RFA) for oesophageal dysplasia

Important information

Before your appointment

- All medications should be taken as normal with a little water.
- If you take warfarin or clopidogrel or other blood thinning medication please read the alert on page 2 as you may need to have an INR test seven days before your procedure.
- If you have diabetes please read the advice on page 9 and 10.
- If you have implanted cardiac device such as a pacemaker or implanted cardioverter defibrillator please contact the endoscopy unit on 01223 216515.
- If you have any questions about the procedure or find that you cannot keep this appointment, please contact the endoscopy office between 9:00 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.
- Please ensure you have arranged an escort home. We cannot sedate you if you do not provide details of your escort.

At the hospital

- You appointment letter will specify whether your procedure will happen in the main endoscopy department at level 3 of the Addenbrooke’s Treatment Centre (ATC) or in the research endoscopy unit of the ground floor (level 2) of Cambridge Clinical Research Centre (the entrance is on the left of the ATC entrance).
- Use the ‘Car Park 2’. The car park is busy early in the morning; please allow yourself enough time to arrive in time for your appointment. Take your parking ticket to the Endoscopy reception desk to have your ticket stamped; this will enable you to have discounted parking.
- Please note you need to arrive 30 minutes prior to your appointment time for your pre procedure check. The length of time you will be here will vary enormously but may 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>
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<tr>
<th>Warfarin:</th>
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<tr>
<td>• You should stop Warfarin five days before the endoscopy.</td>
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<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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<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>• valvular heart disease</td>
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<td>you may need Heparin injections instead of Warfarin. Please contact the endoscopy department for further advice.</td>
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<th>Clopidogrel:</th>
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<td>• You should stop Clopidogrel seven days before the endoscopy.</td>
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<td>If you have:</td>
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<td>• coronary artery stent</td>
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<td>Please contact the endoscopy department for further advice.</td>
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<th>Rivaroxaban, Apixaban, edoxaban, dabigatran:</th>
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<td>• You should stop your medication 2 days before the endoscopy</td>
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<td>• The nursing staff will confirm when you need to restart your medication before you are discharged home.</td>
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<th>Other anticoagulant medication:</th>
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<td>Aceenocoumarol, sinthrome, phenindione, dindevan: If you are taking any of these please contact the endoscopy department 01223 216515</td>
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What is a gastroscopy with radiofrequency ablation (RFA)?

Your doctor has requested this procedure to help investigate and manage your medical condition. This is a specialist procedure and will be performed by a consultant who has been trained in RFA and is experienced in specialist endoscopy techniques.

Gastroscopy is an examination of the upper gut, which is the oesophagus (gullet), the stomach and duodenum (part of the small intestine joining the stomach). The procedure involves passing a narrow flexible instrument through the mouth, into the gullet (oesophagus) and then into the stomach and duodenum to examine the lining.

What is dysplasia in the oesophagus?

Dysplasia is a term used to describe cells in the lining of the gullet that look abnormal when they are looked at under the microscope. It commonly occurs in patients with Barrett’s oesophagus. The more severe forms of dysplasia (known as ‘high grade dysplasia’) can signify that the cells have the potential to turn cancerous. Oesophageal cancer is a serious condition and we would rather prevent it occurring or catch it at a very early stage when it can be very successfully treated.

What are the options for treating dysplasia in the oesophagus?

When a diagnosis of low-grade or high-grade dysplasia is made, we will have a detailed discussion about the options available to you. There are pros and cons to each. The options are:

1. Repeated endoscopy examinations to monitor the abnormal areas so that if cancer develops, it is picked up at an early stage when it can still be successfully treated.
2. Endoscopic treatment to destroy (or ‘ablate’) the cells lining the oesophagus.
3. Surgery to remove the oesophagus (called ‘oesophagectomy’).

Clinical guidelines recommend endoscopic ablation as best treatment option for Barrett’s oesophagus with dysplasia.

About radiofrequency ablation (RFA)

Radiofrequency ablation is the name given to a procedure where a balloon device is passed down the oesophagus (gullet) and energy passed through the balloon to burn away the lining of the gullet containing the abnormal (dysplasia) cells within it. It is performed very much like endoscopy procedures you have undergone before.
Is radiofrequency ablation widely used?

Radiofrequency ablation is a relatively new procedure in the oesophagus. It is used to treat conditions in other parts of the body such as the liver.

NICE have issued guidance (interventional procedure guidance 244) saying that, as a new procedure for treating oesophageal conditions, close monitoring of patients who undergo this treatment should be undertaken to ensure that it produces excellent long term results. You may be asked by the clinical team for your details to be put in the UK RFA Registry to help monitor safety and efficacy of this treatment across the country.

What is the aim of radiofrequency ablation?

Dysplasia and very early oesophageal cancer affects only the cells lining the oesophagus. In performing radiofrequency ablation, we can destroy these abnormal cells. When the treatment has been performed, we expect the oesophagus lining to heal with normal cells. However it may take up to 4-5 treatments to clear all the abnormal cells of the oesophagus (on average 2 or 3)

Intended benefits of the procedure

To treat abnormal cells within the lining of the oesophagus and prevent the development of cancer, therefore preventing the need for major surgery.

Who is suitable for radiofrequency ablation?

Patients with high grade dysplasia and early cancer in the oesophagus can potentially undergo this treatment.

Getting ready for the procedure

Wear loose fitting washable clothing and leave valuables at home.

On arrival to the department

Please register your arrival with the receptionist, they will ask for your pre-procedure questionnaire. Some patients may arrive after you but be seen quicker; we have seven procedure rooms all undertaking different procedures therefore patients are not seen in arrival order.

Before your procedure you will meet one of the nurses who will ask you some health questions and explain the procedure to you.

Once this is completed, you will be escorted to a single sex changing area. You are able to wear your own clothes for this procedure. Your escort cannot wait with you from this point and can leave the department until you are ready to go home.

You can change your mind about having the procedure at any time.

Sedatives

Radiofrequency ablation can be performed under sedation or general anaesthesia.

1. **Intravenous sedation**: this will be administered via a plastic tube called a cannula which is inserted into a vein, and will make you feel relaxed and sleepy but not
unconscious (this is not a general anaesthetic). This option means you may not be aware of the procedure.

2. **General anaesthetic:** an anaesthetist will be present in the room to give you medications to make you unconscious. A tube may be passed in to your airways to help you with breathing when you are unconscious. The anaesthetist will be present in the room throughout the procedure to monitor you while you are unconscious. At the end of the procedure he will assist you as you wake up from the effect of the anaesthesia.

After the procedure

- You will need to stay whilst you recover which may take up to an hour or more.
- You will need to be escorted home; your procedure will be cancelled if you do not have an escort.
- The injection will continue to have a mild sedative effect for up to 24 hours and may leave you unsteady on your feet for a while.

You must arrange for a responsible adult to collect you from the department and take you home. You will not be able to drive yourself. You cannot be collected in a taxi without your escort present.

Please provide reception with the contact details of your escort, they need to be available to collect you from 90 minutes after your appointment time.

If you are entitled to use hospital transport, an escort is not required. Please inform the department prior to your appointment if you have arranged hospital transport.

**What happens during the procedure**

You will be collected from the changing room by the endoscopist and taken to a private bay to complete your consent form, when this has been completed they will escort you to the procedure room. The team in the procedure room will introduce themselves and ask you some questions; this is to confirm you ready and prepared to continue with the procedure.

In the procedure room, we will ask you to remove false teeth, glasses and hearing aids in the left ear. We will make you comfortable on a couch lying on your left side. The endoscopist or anaesthetist will administer the sedation or general anaesthetic. We will put a plastic guard into your mouth so that you do not bite and damage our instrument. We will also put a plastic ‘peg’ on your finger to monitor your pulse and oxygen levels. For your comfort and reassurance, a trained nurse will stay with you throughout.

When you are sleepy, the endoscope is passed down your gullet to look carefully at the area in the gullet to be treated. Once the area has been assessed and we have confirmed it is suitable to carry out the procedure, a balloon device will be passed down the gullet over a guiding device to perform the treatment. To pass the balloon device the camera will need to be removed and re-inserted again in the gullet, hence you may feel the sensation of the camera coming out and going back in again. Passing the balloon down is no different to the endoscope passing down the gullet during an endoscopy.
If the area to treat is small, instead of ablating with the balloon we may decide to use a little device that is mounted on the tip of the camera. This looks like the tip of a finger and delivers the energy once in contact of the lining of the gullet.

On average, the procedure will take about 30 to 45 minutes. If the procedure is carried out under sedation 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.

**Serious or frequently occurring risks**

Radiofrequency ablation is a safe procedure and serious complications are very rare. For one of two weeks after the procedure, you may experience mild or moderate pain behind the breast bone and swallowing difficulties. This is normal. The risk of tearing the gullet or inducing significant bleeding requiring transfusion is less that 1:1000 RFA procedures. There is a 1:20 risk that as result of the RFA treatment the food pipe can shrink down, making your swallowing difficult for longer than two weeks. This is reversible, but may require another endoscopy performed soon to stretch up the narrow area.

Rare complications include aspiration pneumonia (inflammation of the lungs caused by inhaling or choking on vomit) and an adverse reaction to the intravenous sedative drugs.

When you go home you should contact us if you experience any of the following:
- Severe Chest pain
- Shortness of breath
- Abdominal pain
- Bleeding
- Great difficulty swallowing persisting for over two weeks

**After the procedure**

We will take you to a recovery area while the sedation wears off. When you are sufficiently awake, we will give you a drink before you get dressed. You can then go home; this may be up to an hour following the procedure.

We advise you not to drive, operate machinery, return to work, drink alcohol or sign legally binding documents for a 24-hour period after the procedure. **We also advise you to have a responsible adult to stay with you for the next 12 hours.** You can eat and drink as normal.

You may feel a little bloated and have some wind-like pains because of the air in your gut; these usually settle down quickly.

We will always do our best to respect your privacy and dignity, e.g. with the use of curtains. If you have any concerns, please speak to the department sister or charge nurse.
When I go home

- After radiofrequency ablation, 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.
- **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 may be prescribed double the amount you were taking or an additional tablet.
- You can also take simple ‘over the counter’ indigestion remedies.

When will I know the result?

The endoscopist or endoscopy nurse will tell you about the procedure in the recovery area when you are awake. If you would like more privacy, we will take you to a private room.

The sedation can affect your ability to remember any discussion. If you would like someone with you when you talk to the endoscopist or endoscopy nurse please inform the nurse looking after you who will arrange for you to be seen in a private room with your escort when they arrive.

A follow up endoscopy is generally arranged in three to six months from the treatment to assess whether the treatment has been effective and possibly apply another treatment.

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.

After discharge

If you experience any severe pain or persistent bleeding you should contact your GP informing them that you have had a gastroscopy with RFA.

If you are unable to contact your GP: during working hours (08:00-18:00) contact the endoscopy department on 01223 216515, outside of these hours please attend your nearest emergency department informing them that you have had a gastroscopy with RFA.

When you go home you should contact us if you experience any of the following:

- Severe Chest pain
- Severe Abdominal pain
- Shortness of breath
- Bleeding
Alternatives to radiofrequency ablation?

There are other forms of endoscopic ablation for Barrett’s oesophagus with dysplasia. One of them is argon plasma coagulation (APC), which used argon gas to destroy the superficial lining. This is usually performed for small patches of Barrett’s oesophagus, but it is no preferred when the area to ablate is larger than 1cm. Other forms of ablations (such as cryotherapy) are experimental and not recommended for routine use.
Diabetic Advice Gastroscopy with RFA 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 ½ 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.
Diabetic Advice Gastroscopy with RFA 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 1/2.
- 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 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 or audio, please contact Interpreting services on telephone: 01223 256998, or email: interpreting@addenbrookes.nhs.uk For Large Print information please contact the patient information team: patient.information@addenbrookes.nhs.uk

Document history
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