Endoscopy Department

Gastroscopy with oesophageal variceal banding or injection

Important information

Before your appointment

- All medications should be taken as normal with a little water.
- If you are take Warfarin, please read the ‘Alert for patients on Warfarin’ as you may need to have an INR test seven days before your procedure.
- If you have diabetes please read the advice on page 7 and 8.
- 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.

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 your appointment letter to the reception desk in the ATC 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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<tbody>
<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</strong> is <strong>3.0 or less</strong>, continue with your usual daily Warfarin dose.</td>
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<tr>
<td>• If that <strong>INR result</strong> is <strong>more than 3.0</strong>, ask your supervising anticoagulant service for advice to reduce your daily <strong>Warfarin dose</strong> so that your INR is 3.0 or less when you have the Endoscopy.</td>
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<table>
<thead>
<tr>
<th>Warfarin: for patients advised to stop medication</th>
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<tr>
<td>• You should <strong>stop Warfarin 5 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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<tr>
<td>If you have:</td>
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<tr>
<td>• metal mitral valve</td>
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<tr>
<td>• metal valve + previous stroke/thrombosis</td>
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<tr>
<td>• valvular heart disease</td>
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You may need Heparin injections instead of Warfarin. Ask your local anticoagulant service for advice.

<table>
<thead>
<tr>
<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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<table>
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<tr>
<th>Clopidogrel: for patients advised to stop medication.</th>
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<tr>
<td>• You should stop <strong>Clopidogrel seven days</strong> before the Endoscopy.</td>
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<th>Other anticoagulant medication:</th>
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<tr>
<td>Acenocoumarol, sinthrome, phenindione, dindevan: If you are taking any of these please contact the Endoscopy department 01223 216515.</td>
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</table>
Why is variceal banding or injection needed?
You have been found to have oesophageal varices. These are swollen veins in your oesophagus (gullet), rather like varicose veins some people have in their legs. They are formed when blood flow through the liver is restricted. These veins could bleed, causing you to vomit blood, (possibly in large quantity), so it is important to try to reduce or shrink and obliterate them if possible. This can be done during a procedure called a gastroscopy.

A gastroscopy is a procedure that allows us to look directly at the lining of the upper gut. We use a gastroscope which is a long flexible tube (thinner than your little finger) with a light at the end. It is passed through the mouth, into the oesophagus and then into the stomach and duodenum. The procedure can take between five and 15 minutes.

Treatment of oesophageal varices
This is either by compression or injection. The method used will be decided by the endoscopist and discussed with you.

Variceal banding (variceal ligation)
This is the preferred method for treating oesophageal varices using a similar technique that is used for the treatment of haemorrhoids (piles) using compression with tight rubber bands.

- A hollow tube loaded with small rubber bands is attached to the end of the gastroscope. This is passed into the oesophagus (gullet), the vein identified, suction applied and the elastic bands positioned. This is repeated as many times as is necessary at each procedure until all the veins have been eradicated.
- After a couple of days, a clot forms in each treated vein, which causes them to shrink. Several treatments may be required.

Injection of varices
- This procedure can be carried out using an injection needle, which is passed down the channel in the gastroscope whilst it is in your oesophagus (gullet).
- Through the needle, a drug can be injected into the varices, which creates a clot, blocking them off and causing them to shrink.
- In order to completely shrink the veins several injections may be needed. This may need to be repeated several times.
Getting ready for the procedure
Wear loose fitting washable clothing and leave valuables at home. On arrival at the department we will explain the procedure to you and ask you to sign a consent form. You can change your mind about having the procedure at any time.

Sedatives
There are two options for these procedures:

1. **No sedation option**: we will spray local anaesthetic to the back of your throat. This will make it numb so that you cannot feel the endoscope. The numbness will last for about half an hour. The advantage is that you can leave as soon as you have talked to the endoscopist and resume your normal activities, for example working, driving. You will be fully aware of the procedures. Most patients find this acceptable and not too unpleasant.

2. **Intravenous sedation option**: An intravenous injection is given into a vein to make you feel relaxed and sleepy. The sedative will not put you to sleep (this is **not** a general anaesthetic). This option means you may not be aware of the procedures.

The disadvantages of this option are:
- a) You will need to stay whilst you recover which may take up to an hour or more.
- b) You will need to be escorted home.
- c) 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.

If you are an outpatient (not staying in hospital), you **must** arrange for a responsible adult to come with you, 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.

What happens during 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 will give you the injection. 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. As the gastroscope goes through your mouth you may gag slightly, this is quite normal and will not interfere with your breathing.

During the procedure we will put some air in to your stomach so that that we have a clear view, this may make you burp and belch a little. This is also quite normal but some people find it unpleasant. We will remove the air at the end. Minimal restraint may be appropriate during the procedure. However, if you make it clear that you are too uncomfortable the procedure will be stopped.
Potential risks
Gastroscopy procedures carry a very small risk (one in 10,000 cases) of haemorrhage (bleeding) or perforation (tear) of the gut following which surgery may be necessary. There may be a slight risk to teeth, crowns or dental bridgework; you should tell the nurses if you have any of these

- Ulcers usually form after banding or sclerotherapy and you should be given medication to help them heal. There is a small risk of bleeding in the few days following the procedure. Very rare complications include extension of thrombosis towards the liver after variceal injection, infection of ulcers with possible extension to the spinal cord, and when glue is used to inject the varices this can get into the circulation and affect the lungs (‘embolism’).

As with any procedure the potential benefits must be compared with any risks. Complications are generally less with the banding technique and this procedure is used preferentially. The injection treatment in the non emergency situation carries a complication rate of between one to two percent (1 to 2%).

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 drugs.

After the procedure
If you are given a local anaesthetic throat spray, you may go home immediately after the procedure. You are advised not to have anything to eat or drink until the numbness has worn off. After this, you can eat and drink normally.

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

When you are sufficiently awake, we will give you a drink before you 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 any legally binding documents for the a 24 period. We also advise you to have a responsible adult to stay with you for the next 12 hours.

Afterwards, you may notice some chest discomfort and the back of your throat may feel sore for the rest of the day. You may also feel bloated if some of the air remains in your stomach. All these discomforts will pass and need no medication.

Over the next few days
A soft diet is recommended for the first 24 hours particularly after banding. The action of the injection or banding will cause the veins to ulcerate over the next few days before healing. This can cause some soreness on swallowing for a few days. It is possible for a stricture (narrowing) to form in the oesophagus (gullet). This is more likely if the varices are large and repeated treatments (especially injection treatments) have been required. This may make swallowing difficult but can be treated. You may need to have a further procedure to ensure that varices have been completely eradicated.
After your procedure, if you have any of the following problems you should 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 be able to tell you how the procedure went immediately after the procedure. If you had sedation, it is a good idea to have someone with you when you talk to the endoscopist because the sedation can make you forget what has been discussed.

Details of the results and any necessary treatment should be discussed with the doctor who recommended you to have the procedure.

**Alternatives**
In some cases, depending on individual factors such as the symptoms present and the condition being treated, there may be alternatives to having injection or banding. These may include drug treatment.

**For more information:**
- Contact the endoscopy office between 09:00 and 17:00 Monday to Friday on 01223 257080.
- See [www.addenbrookes.org.uk/consent](http://www.addenbrookes.org.uk/consent)
Gastroscopy + banding or injection 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
Gastroscopy + banding or injection 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
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- 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 currently working towards a smoke-free site. Smoking is only permitted in the designated smoking areas.

For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169

Help with this leaflet:

If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or patient.info@addenbrookes.nhs.uk

Document history
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