

# Upper Gastrointestinal (GI) Endoscopy with treatment of varices

## Information for patients

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Your doctor has referred you for investigation and possible treatment of varices (varicose veins) in the oesophagus or stomach.

### What is an Endoscopy?

An endoscopy is an examination of your oesophagus (sometimes called your gullet or food pipe), stomach and duodenum. The duodenum is the first part of your small intestine. A flexible tube with a camera (endoscope) is passed to the back of your mouth and down into your gullet. This will give the endoscopist a clear view of the lining of your gullet, stomach and the first part of the small intestine (duodenum).

Your endoscopy is more involved than having a straightforward inspection. The Endoscopist is also using the procedure to give you treatment for your condition. This is known as therapeutic endoscopy; in this case the therapy is called 'Banding or Injection of varices'.

### Why do I need to have treatment of varices?

These are swollen veins, usually in the oesophagus (gullet) or stomach, rather like varicose veins in your legs, which form when blood flow through the liver is disturbed. These veins can easily bleed, causing you to vomit blood, (possibly in large quantities), so it is important to try to shrink or remove them completely if possible. This can be done by applying small rubber bands around the veins through an endoscope, or sometimes by injecting the veins with a substance to cause clotting. To completely clear all the veins a series of procedures over several weeks may be necessary.

### How do I prepare for these tests?

You need to fast to have the endoscopy, so you should **have nothing to eat for 6 hours and nothing to drink for 4 hours before your appointment.**

If your appointment is in the afternoon, you may have a light breakfast (tea and toast) no later than 8am, but no food or drinks after that.

Small amounts of water (sips) are ok to take up to 2 hours before the procedure.

### How long will I be in the Endoscopy Unit?

You will be given an appointment time. Please attend as close to that time as possible. You might be in the department for 2-4 hours, so you may want to bring something to pass the time, such as a book or magazine.

Please do not bring any valuables (including jewellery) into the hospital.

## **What does the procedure involve?**

### **Before**

A nurse will look after you while you are in the Endoscopy Unit, and you can ask questions at any time. The test will be done by a trained endoscopist (specialist doctor), or by a trainee who will be supervised by a trained endoscopist. We will make the investigation as comfortable as possible for you.

Before we start the procedure, we will check your breathing rate, heart rate, blood pressure and oxygen levels. You might be given extra oxygen through small tubes placed at your nose. Some local anaesthetic will be sprayed to the back of your mouth, to numb the area before the endoscopy is carried out. A small plastic guard will be placed in your mouth to protect your teeth and to keep your mouth in a comfortable position.

### **During the procedure**

The endoscopist will pass the endoscope over your tongue to the back of the mouth and down into your stomach. This will not interfere with your breathing and you will be able to breathe through your nose or your mouth, whatever you prefer. This test takes around 15-20 minutes and is not painful.

Should you require banding treatment after the initial examination, the endoscope is removed and re-inserted with the rubber bands attached. Suction is applied to the veins with the endoscope to allow the band to be released over the vein. If an injection is required the needle is passed through the middle of the endoscope and the vein is injected with a medication that makes it clot.

### **Sedation**

Some people feel anxious about the thought of having these tests done. We help with this by giving you an injection of the medications fentanyl (an opioid painkiller) and midazolam (like valium, a sedative). Their main purpose is to take away feelings of anxiety, make you feel more comfortable and relaxed, but you will still be awake. If you choose to have this, you must have someone to pick you up from the unit, take you home and stay with you for the next 12 hours. If you do not do this you will not be able to have sedation for your test.

### **Samples**

During the investigation, we may need to take some tissue samples (biopsies) from your gastrointestinal tract, this is painless. The samples may be retained by us. Photographs and/or a video recording may also be taken for your records.

### **Consent**

Before we can do the test, we will need you to sign a form giving us permission, if you are happy for the test and/or treatment to be carried out.

Before you do this, you need to understand why the test is being done and any potential risks. The following information will help with this, but if you have any questions, please contact the nursing staff on the numbers provided on page 8 of this booklet.

### **Benefits of the procedure**

The benefit of the procedure is to find out if you have varices, and which treatment is most suitable for you.

## Risks of the procedure

Endoscopy is usually a safe test, but there are risks from the test that you need to know about before you decide to give us permission (consent). The endoscopists are trained in cutting down risks as much as possible, but we cannot remove risk completely. The main risks are:

- **Bleeding** -there could be some bleeding if a biopsy is taken or a polyp is removed. This usually settles down on its own. Serious bleeding during a simple endoscopy is very rare. The risk of serious bleeding is a little higher with varices treatments: around 1 in a 100 cases. The risk may be increased by the presence of a bleeding condition, or if you are on blood thinner medicine, your blood tests will be checked beforehand to ensure it is safe to proceed, and blood thinning medication will usually be put on hold to reduce any bleeding risk
- **Perforation** - is a tear of the lining of the oesophagus, stomach, or duodenum. This occurs in less than 1 in 1000 cases, but can occur in more complex cases. A perforation will require admission to hospital for intravenous fluids, pain relief and antibiotics, and might require surgery to repair
- **Missed pathology** - endoscopy is the best test for looking at the lining of the gullet, stomach and duodenum however, because of the folds in the gut there is a chance that something small can be missed during your test. If you have a normal endoscopy and later on develop some new symptoms, you should let your GP know
- **Intravenous (IV) sedation** - a sedative medicine is given through a vein to help relax a patient. Sometimes sedation can cause problems with breathing, heart rate and blood pressure. If any of these problems do happen, they usually don't last long. A trained nurse will monitor this and look after you during the procedure and will deal with any problems straight away

Older people, people who have breathing difficulties or people who have problems with their heart may be checked by a doctor before having the procedure. It might be safer for these people to have less or no sedation, because the risk of problems from sedation might be higher for them

- **Damage to teeth** - very rarely this procedure can result in damage to teeth, especially if your teeth are weak or damaged. Every attempt will be made to prevent this, however we cannot take away this risk completely. For this reason dentures are removed, and you will be asked about loose or weak teeth, crowns or bridgework before we start the test
- **Incomplete procedure** - there is a small chance that we are unable to complete your procedure for various reasons. If your procedure is not completed on the day of your appointment, the endoscopist will speak to you before you go home and let you know the next steps.

## Risks associated with the endoscopic treatment of your condition

Endoscopic treatment has revolutionised the way in which some diseases are treated. It is often the case that conditions previously only treated by surgery can now be dealt with using endoscopy. The specific risks associated with endoscopic treatment you are having are described below.

The occurrence of any of these may delay your discharge from hospital. It is important to appreciate that a serious complication in very rare circumstances could prove fatal.

### **Treatment of varices**

The presence of varices usually indicates that there is serious liver disease present. Before the development of endoscopic techniques, varices were either left untreated, treated by major surgery or by complex X-ray techniques. There are rare but serious complications which you should be aware of, but these still represent a relatively low risk compared to the risk of life-threatening bleeding from varices, or complications of major surgery:

### **Immediately following the procedure**

You might notice some chest discomfort, but this should pass after a few hours.

It is likely that the back of your throat will feel a little sore for a few hours afterwards.

Occasionally the procedure does cause some bleeding, but this is usually not serious and settles quickly. If bleeding occurs whilst you are in the department we will admit you to hospital, if it occurs when you are at home you must call emergency services on 999.

### **Over the next few days**

The action of injection or banding usually causes ulcers to form over the varices. This, in turn, can cause some soreness when you are swallowing for a few days after the procedure.

### **Other complications**

These are rare but can include:

- perforation (or tear) of the oesophagus
- if the varices (veins) have been injected then the clot formed may extend and move into more major veins of the liver or spinal cord, resulting in damage
- Infection of the blood

You can ask for more information at any time, so if you have questions please bring this information booklet along with the **unsigned** consent form, and you can speak to a health care professional before signing the form.

Please let us know if you do not plan to come to your appointment, as there is a waiting list for this procedure and we could give your appointment to someone else who is waiting.

### **What are the alternatives?**

Patients with varices, which have not yet bled, may be advised to take medicines which lowers pressure and the risk of bleeding. This is a safe alternative for some patients, but if you have been advised to have endoscopic treatment it will mean that this is not considered a good option for you, or that some bleeding has already occurred.

## Medicines

Please bring your current medicines with you on the day of your procedure.

Some of the tests need you to stop taking medicines that thin your blood (anticoagulants/antiplatelets) such as:

**Warfarin**

**Heparin**

**Clopidogrel**

**Anticoagulants (such as Rivaroxaban, Apixaban, Edoxaban or Dabigatran).**

If you are taking any of these medicines, you **must** contact the Endoscopy department - phone number on page 8 of this booklet. A nurse will ask you a few questions and let you know if you should stop taking your medicines or not.

Please note: you do not need to stop taking Aspirin before your procedure.

## Other medicines

If you have any questions about your medicines, please call the telephone number for the nurses shown on page 8.

## What happens after the procedure?

You will be able to rest in the recovery area until you feel able to have a drink and something light to eat. This varies from person to person, but is usually around 30-60 minutes. You will have your pulse and blood pressure checked a few times and your nurse will ask you how you feel.

Once everything has returned to normal you will be ready for discharge (to leave the hospital). Some people recover quickly but others need a bit more time.

If you have had sedation medicine for your procedure, you **must** be picked up from the unit. If the person taking you home has left the department, the nursing staff will telephone them when you are ready to go. As you will be having sedation, you might feel drowsy for the rest of the day, the effect of the sedation lasts for 24 hours.

Before you go home the nurse or endoscopist will go over the results of the test. They will let you know if any medication or extra tests are needed, and they will tell you if you need another appointment. You will also be given some written information with details of the results of the test.

## If you choose to have sedation and/or a painkilling injection:

- **You should not drive for 24 hours, or you will be driving under the influence of drugs**
- **You should not drink alcohol, look after other people, sign any legally binding documents or operate machinery or possibly dangerous household appliances for 24 hours following the procedure.**

## Points to remember

- If you choose sedation, you must have someone to take you home and stay with you for 12 hours. We would advise that you arrange to have someone stay with you overnight
- Our aim is for you to be seen and have your procedure as soon as possible after your arrival. However, the department is very busy and also deals with emergencies, so it is possible under these circumstances that your procedure may be delayed
- If you have any problems with worsening abdominal pain or continuing bleeding after your procedure:

please contact the Endoscopy department between the hours of 8am – 5pm Monday to Friday on the telephone number on page 8 of this booklet.

Outwith these times please phone **NHS24 on 111**.

## Information for Patients with other medical conditions

### Information for patients with implanted cardiac devices (pacemakers, defibrilators)

Some implanted cardiac devices need to be adjusted before endoscopy can be carried out. Please telephone the number for the nurses shown on page 8. The nurses can then arrange for this to be done.

### Information for patients with diabetes

Most people with diabetes do not need to be admitted to hospital for endoscopy. We try and arrange for you to have an early morning appointment so that you do not need to fast too long. If you do not have an early appointment, please phone the number for the nurses on page 8 to rearrange your appointment.

You need to fast before the procedure, so you may need to adjust your diabetes medicines to prevent your blood sugar becoming too low. As a result your diabetic control may not be as good as usual, but it will return to normal soon after the procedure when you're eating and drinking normally. However, it is important that you avoid low blood sugars (less than 4 mmol/l) and high blood sugars (more than 15 mmol/l).

**Diet-treated diabetes:** If your diabetes is controlled by diet alone (i.e. you do not take tablets or injections to control your blood sugar levels), then the limited food fast we ask you to follow should have little or no impact on your diabetes. If you are unsure if you take tablets for your diabetes, then you should contact your GP or your Diabetic Specialist Nurse for advice.

**Tablet-treated diabetes:** Continue taking your tablets as normal until the day of your procedure, when you should not take your diabetes tablets.

Check your blood sugar more often than usual if you have a monitor. If you do not monitor your sugars, do not worry. The risk of your sugar levels going low or high is much less than for people with insulin-treated diabetes. If your blood sugar drops or you feel shaky and sweaty, you can take a sugary drink like Lucozade or Lemonade (not diet) to bring your levels back up. You should start to feel better within 10 to 15 minutes. If you do not feel better, then you should contact your GP or NHS 24 on 111.

**Diabetes treated with GLP-1 Analogue Injections:** If you take weekly or daily injections of GLP-1 analogues (e.g. Trulicity, Victoza, Byetta, Bydureon) then you should continue to take these as

normal (along with any tablets for your diabetes). Follow the advice above as for tablet-treated diabetes.

**Insulin-Treated Diabetes:** ideally you should have nothing to drink for 4 hours before your appointment time. Check your blood sugar on waking. If your blood sugar is less than 5 mmol/l, have a small glass of a sugar-containing drink. Inform the nurse on arrival in the endoscopy unit that you have done this.

Don't take your morning dose of insulin, but bring all your blood testing and insulin injecting equipment with you.

**On the day of the examination:** A nurse will check your blood sugar level when you arrive in the endoscopy unit.

If you need more advice about your diabetes medicines, please contact your Diabetes Specialist Nurse as soon as possible. Remember to bring your diabetic tablets, insulin and injecting equipment with you when you attend for your appointment.

After the test the nursing staff will let you know when you can eat and drink again. Take your tablets/insulin once you have had something to eat.

When you get home, your sugar levels may vary for a short time, but this should quickly return to your usual level.

## Postponing your appointment

While we make every effort to avoid this where possible, there is always a risk that your procedure may be cancelled at short notice. This is due to either emergency patients who require urgent surgery or other reasons which are beyond our control. We realise that this can cause distress and inconvenience, but in the event that your procedure is postponed, you will be offered a new date as soon as possible.

## Keeping your appointment

If you cannot keep your appointment, or have been given one that is unsuitable, please change it as soon as possible by phoning **0131 536 4162**. Your call will give someone else the chance to be seen and will help us keep waiting times to a minimum.

## Public transport and travel information

Bus details available from:

Lothian Buses on **0131 555 6363** [www.lothianbuses.co.uk](http://www.lothianbuses.co.uk)

Traveline Scotland on **08712 002 233** or [www.travelinescotland.com](http://www.travelinescotland.com)

Train details available from:

National Rail Enquiries on **03457 484 950** or [www.nationalrail.co.uk](http://www.nationalrail.co.uk)

## Patient transport

Patient Transport will only be made available if you have a medical/clinical need. Telephone **0300 123 1236** \*calls charged at local rate up to 28 days in advance to book, making sure you have your CHI Number available. Hard of hearing or speech impaired? Use text relay: **18001-0300 123 1236\*** (calls charged at local rate). To cancel patient transport, telephone 0800 389 1333 (Freephone 24-hour answer service).

## Interpretation and translation

Your GP will inform us of any interpreting requirements you have before you come to hospital, and we will provide an appropriate interpreter. If you are having this procedure as an existing in patient, staff will arrange interpreting support for you in advance of this procedure. This leaflet may be made available in a larger print, Braille, or your community language.

**For legal reasons family members cannot interpret for you.**

**Family members cannot come into the procedure room with you.**

## Patient Information Online

Our information leaflets are now available online. To access these, please visit the website below or scan the QR code:

<https://policyonline.nhslothian.scot/PatientInformation>



## Contact telephone numbers

**To cancel or change your appointment: 0131 536 4162**

**To speak to a nurse:**

Between 8am – 5pm Monday to Friday, call-

Royal Infirmary of Edinburgh Endoscopy unit   **0131 242 1600**

St John's Hospital (voicemail)                   **01506 523 982**

Western General Hospital Endoscopy unit   **0131 537 1695**

Outwith these times, please phone **NHS24 on 111**

## Further information

Please bring this information booklet and the consent form to your appointment, where the healthcare professional will go through the consent form with you, and answer any of your questions before you sign it.



<b>Consent Form for an Upper gastrointestinal (GI) Endoscopy with treatment of varices</b>	Addressograph, or
	Name:
	DOB:
Unit No./CHI:	
Name of procedure/investigation: <b>Upper GI endoscopy with treatment of varices</b> Inspection of the upper gastrointestinal tract using a flexible scope – with or without a biopsy, and possible treatment of varices - banding or injecting varices Please read the patient information leaflet for further details Upper Gastrointestinal Endoscopy with treatment of varices v1.0'	
This procedure will involve: Intravenous analgesia <input type="checkbox"/> Sedation <input type="checkbox"/> Local anaesthetic throat spray <input type="checkbox"/>	

<b>Following a request for further information: Statement of the healthcare professional</b>	
With appropriate knowledge of the proposed procedure, I have explained the procedure to the patient, in particular:	
The intended benefits of the procedure:	
The possible risks involved. I have discussed and listed below the significant, unavoidable and/or frequently occurring risks, including any risks that may be of specific concern to the patient:  Risks specific to Upper GI Endoscopy treatment of varices are bleeding, perforation, incomplete procedure, missed pathology and possible damage to teeth.	
The benefits and risks of alternative treatments that might be offered for this patient – including the option of no treatment:	
Any extra procedure(s) that might become necessary during this procedure e.g. blood transfusion <input type="checkbox"/> Other procedure (please state) <input type="checkbox"/>	
Healthcare Professional's signature: Print name and job title:	Date: ____/____/____

<b>Statement of interpreter (where appropriate)</b>	
I have interpreted the information above to the patient/parent to the best of my ability and in a way in which I believe that she / he / they can understand	
Signature: Print name: Or, please note the telephone interpreter ID number:	Date: ____/____/____

<b>To the patient</b>  <p><b>You have the right to change your mind at any time, including after you have signed this consent form.</b></p> <p>I have read and understood the information in the patient information leaflet.</p> <p>I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.</p> <p>I wish to proceed with the planned procedure.</p>	
Signature: Print name:	Date: ____/____/____
If signing for a child or young person ( <i>delete if not applicable</i> ) I confirm that I am a person with parental responsibility for the patient named on this form:	
Signature: Relationship to the patient:	Date: ____/____/____
If the patient is unable to sign but has indicated his/her consent, a witness should sign below:	
Signature (Witness) Print name: Address:	Date: ____/____/____

<b>Confirmation of Consent (where the procedure/treatment has been discussed in advance)</b>	
On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.	
Healthcare Professional's signature: Print name and job title:	Date: ____/____/____

<b>Withdrawal of patient consent</b>	
The option of withdrawing consent has been discussed and agreed by the team treating the patient.	
Signature: Print name:	Date: ____/____/____
Healthcare Professional's signature: Print name and job title:	Date: ____/____/____