

Upper GI Endoscopy and Botox Injection

Information for patients

Your doctor has referred you for a procedure known as an upper gastrointestinal (GI) endoscopy and Botulinum Toxin (botox) injection.

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 part of your small intestine. A flexible tube (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 (the 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 the Injection of Botulinum Toxin (botox) into a part of your gut lining.

Botulinum toxin (botox) therapy

You have been diagnosed with a disorder that affects the muscles of your gut contracting, usually in the oesophagus (gullet). Your consultant has decided to treat this condition with Botulinum Toxin.

Botulinum Toxin can be injected directly into the muscle of the gut wall using a special needle, which can be passed down the video endoscope. The toxin paralyses the muscle and this effect can lead to an improvement in your symptoms.

The most common reason for having this procedure is:

Achalasia

This is a movement disorder of the oesophagus in which the lower oesophageal sphincter muscle, which lies at the end of the oesophagus/the entrance to the stomach fails to relax and open. When this muscle fails to open during swallowing, it causes a delay of the food passage through the oesophagus (gullet) and into the stomach.

How do I prepare for these tests?

It is very important that you follow these instructions, as failure to do so could result in your procedure being cancelled.

- 24 hours before the procedure start on a liquid only diet
- 6 hours before your procedure stop drinking and remain nil by mouth until after your 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?

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 supervised by a trained endoscopist.

We will check your breathing, heart rate, blood pressure and oxygen levels. You might be given 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.

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.

Sedation

Some people feel anxious about the thought of having these tests done. We can 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, and make you feel more comfortable and relaxed but you will still be awake. If you choose to have this you must arrange for 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. Photographs and/or a video recording may be taken for your records.

Consent

Before we can do the test, we need you to sign a form giving us permission, if you are happy for the test to be done.

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 7 of this booklet.

Benefits of the procedure

The benefit of the procedure is to alleviate symptoms caused by the muscles in your lower oesophagus, allowing food and drink to pass through more easily.

Risks of the procedure

Endoscopy is usually a safe test to have done 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 at biopsy/injection site. This usually settles down on its own. Serious bleeding during a simple endoscopy is very rare. The risk may be increased by the presence of a bleeding condition, or if you are on blood thinners, your blood tests will be checked 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 and is very rare with upper endoscopy involving injection of botox. 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 sedation** - that a sedative drug 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 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.

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. There is a waiting list for this procedure and we could give your appointment to someone else who is waiting.

Adverse reactions

Adverse reactions to botulinum toxin are uncommon but include skin rashes and occasional chest pain or heartburn.

What are the alternatives?

The doctor managing your care will have discussed your condition and the treatments available to you and concluded that this is the best option for you at this time.

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

New anticoagulants (Rivaroxaban, Apixaban, Edoxaban or Dabigatran).

If you are taking any of these medicines, you **must** contact the Endoscopy department phone number on page 7 of this booklet. A nurse will ask you a few questions and let you know if you should stop taking your medicines.

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 7.

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, you **must** be picked up from the unit.

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, and the diet you must follow for the next 2 to 3 days, mainly a sloppy diet e.g. porridge, custard, yogurt:-

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.

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 7 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 7. 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 7.

You need to fast before the procedure so you may need to adjust your diabetes medication to prevent your blood sugar becoming too low. Because of this your diabetic control may not be as good as usual, but it will return to normal soon after the procedure when you are 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 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 omit 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.

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: 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 take 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.

Cancellation

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

Traveline Scotland on **08712 002 233** or www.travelinescotland.com

Train details available from:

National Rail Enquiries on **03457 484 950** or 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 appointment: 0131 536 4162

To speak to a nurse:

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**

<p align="center">Consent Form for an Upper Gastrointestinal (GI) Endoscopy with Botulinum Toxin (Botox) Injection</p>	Addressograph, or
	Name:
	DOB:
Unit No./CHI:	
<p>Name of procedure/investigation: Upper GI Endoscopy with Botulinum Toxin Injection Inspection of the upper gastrointestinal tract using a flexible scope – with or without a biopsy Please read the patient information leaflet for further details 'Upper Gastrointestinal Endoscopy with Botulinum Toxin Injection v2.0'</p>	
This procedure will involve: Intravenous analgesia <input type="checkbox"/> Sedation <input type="checkbox"/> Local anaesthetic throat spray <input type="checkbox"/>	

Following a request for further information: Statement of the healthcare professional	
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 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: ___/___/___

Statement of interpreter (where appropriate)	
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: ___/___/___

To the patient You have the right to change your mind at any time, including after you have signed this consent form. I have read and understood the information in the patient information leaflet. 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. I wish to proceed with the planned procedure.	
Signature: Print name:	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: ____/____/____

Confirmation of Consent (where the procedure/treatment has been discussed in advance)	
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: ____/____/____

Withdrawal of patient consent	
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: ____/____/____