Therapeutic Gastroscopy

Oesophago-gastro duodenoscopy (OGD) and oesophageal stent insertion

the procedure explained

Your appointment details, information and consent form

Please bring this booklet with you
An appointment for your **Therapeutic Gastroscopy** has been arranged at:

- **Andover**
- **Winchester**
- **Romsey**

Andover Day Surgery Unit, tel: 01264 835366
Winchester Endoscopy Unit, tel: 01962 828322
Romsey Endoscopy Unit, tel: 01962 825058

*Please telephone the Endoscopy Department on the above numbers if this is not convenient or you would like to discuss any aspect of the procedure before your appointment.*

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**For our information: collection details**

Please write your relative’s or friend’s name and telephone number below

Name ________________________________

Telephone number ________________________
Introduction

You have been advised by your GP or hospital doctor to have an investigation known as a therapeutic gastroscopy.

During this examination the endoscopist is going to treat the specific disease of your oesophagus (gullet).

This procedure requires your formal consent.

This booklet has been specifically designed for patients who are likely to require treatment for diseases of the oesophagus.

*If you are unable to keep your appointment, please notify the department as soon as possible.* This will enable the staff to give your appointment to someone else and they will be able to arrange another date and time for you.

This booklet has been written to enable you to make an informed decision in relation to agreeing to the investigation. At the back of the booklet is the consent form.

**The consent form is an important legal document,** therefore please read it carefully. Once you have read and understood all the information, including the possibility of complications and you agree to undergo the investigation, please sign and date the consent form. You will notice that the consent form is duplicated, allowing you to keep a copy for your records. Please fill it in while it is still attached to this booklet.

If however there is anything you do not understand or wish to discuss further but still wish to attend do not sign the form, but bring it with you and you can sign it after you have spoken to a health care professional.

**What is an OGD?**

The procedure you will be having is called an oesophago-gastro-duodenoscopy (OGD) sometimes known more simply as a gastroscopy or endoscopy.
This is an examination of your oesophagus (gullet), stomach and the first part of your small bowel called the duodenum. The instrument used in this investigation is called a gastroscope. It is flexible and has a diameter less than that of a little finger. Each gastroscope has an illumination channel which enables light to be directed onto the lining of your upper digestive tract and another which relays pictures back to the endoscopist onto a television screen.

Your OGD is more involved than having a straightforward inspection. The Endoscopist is also using the procedure to give you your treatment for your condition. This is known as a therapeutic gastroscopy.

During the investigation, the doctor may need to take some tissue samples (biopsies) from the lining of your upper digestive tract for analysis: this is painless. The samples will be retained. A video recording and/or photographs may be taken for your records.

The procedure will be performed by or under the supervision of a trained doctor, and we will make the investigation as comfortable as possible for you.

In routine examinations some patients have sedation injected into a vein for this procedure. In your particular circumstances, if the endoscopist has recommended that you require endoscopic treatment, you will receive intravenous sedation often in combination with a painkiller.

Why do I need to have a therapeutic OGD?

You have been advised to undergo this investigation to try and treat your symptoms, and if necessary, to decide on further investigation.

Oesophageal stent insertion

You have been advised by your doctor that the appropriate treatment to help improve your swallowing difficulties is to have a stent inserted in your oesophagus (gullet).
What is a stent?

A stent is a tube made of flexible metal mesh which once in position across the narrowed area of your gullet expands to allow fluid and food to pass through to the stomach more easily.

How the stent is inserted and positioned.

All patients who are having a stent inserted are given intravenous sedation often in combination with a painkiller.

A gastroscopy (an explanation of which you will find further on in this booklet) will be performed to examine the problem area, your stomach and duodenum.

It is likely that this procedure will be carried out using x-ray equipment, usually in the x-ray department to assist in positioning the stent. The abnormal area of the gullet will be identified and its position marked.

Sometimes if the abnormal area of the gullet is very narrow it will need to be stretched using an additional procedure which is also described in this book in the oesophageal dilatation section.

Having assessed and prepared the abnormal part of the gullet in this way, the endoscope is finally used to position a fine wire into your stomach. The endoscope is then removed leaving the wire behind. The stent is designed so that in its unopened form can be passed over the wire and carefully positioned.

Once the endoscopist is happy with the positioning, the stent will be released and the wire withdrawn. The stent will then begin to gently expand and restore the diameter of the gullet.

The stent may not fully expand for 3 days and during this time you may experience some chest or back discomfort. This usually settles after a day or two. Chest x-rays and sometimes special scans are required after the procedure.

It is important that you let the doctor or nurse know if you are uncomfortable so that you can be offered appropriate assessment and medication.
Oesophageal dilatation

In some patients, it is impossible to insert a stent without first stretching (dilating) the abnormal area of the gullet.

There are two main methods used to stretch the oesophagus.

Firstly, the gastroscope is used to inspect and to position a guide wire into your oesophagus, passing across the narrowing and onwards into your stomach. X-ray guidance here may be used although not in every case.

Once this guiding wire has been correctly positioned the stretching equipment used is introduced into position along the wire. With this method, a graduated tapered dilator (bougie) is slid over the wire through the narrowing causing stretching as it is advanced through the abnormal area.

In the second method of treatment, a guide wire is unnecessary as the stretching equipment can be positioned using the gastroscope alone. In this circumstance, it is possible to pass the stretching equipment through a small internal channel within the gastroscope itself.

The stretching equipment used is either in the form of an inflatable pressure balloon which is positioned deflated and then inflated to certain pressures within the narrowed area and as the balloon expands the oesophagus also is stretched to reach the diameter of the balloon. Different sizes of balloons can be used in order to safely stretch the oesophagus to the diameter required to improve your symptoms.

The method that is used to treat you is chosen by the doctor and largely depends upon the type of oesophageal problem that you have, and will be discussed with you.

Advice regarding returning to eating and drinking will be given to you. On discharge you will be given a contact number for the Upper Gastrointestinal Nurse Specialist should you need advice and instructions on looking after your stent and your diet.
Risks of Therapeutic OGD with sedation
The doctor who has requested the procedure will have considered and discussed this with you. The risks must be compared to the benefit of having the procedure carried out. There are three sets of procedural risks you should be aware of:

1. Inspection and biopsy only
   Upper gastrointestinal endoscopy is classified as an invasive investigation and because of that it has the possibility of associated complications. These occur extremely infrequently; we would wish to draw your attention to them and so with this information you can make your decision.

   The main risks are of mechanical damage;
   ● to teeth or bridgework
   ● perforation or tear of the linings of the stomach or oesophagus and bleeding which could entail you being admitted to hospital. Certain cases may be treated with antibiotics intravenous fluids. Perforation may require surgery to repair the hole.
   ● bleeding may occur at the site of biopsy. Typically minor in degree, such bleeding almost always stops on its own.

2. Risks associated with the endoscopic treatment of your condition
   Endoscopic treatment has revolutionised the way in which some diseases of the oesophagus and stomach 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 are described below.

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

Oesophageal dilatation
   Occasionally stretching does cause some bleeding but this is usually not serious and settles quickly. Hospital admission would be required if it persisted.
The most serious risk is perforation (making a hole or tear) of the oesophagus or stomach. This can occur in up to approximately 10% of cases and may require surgery. Sometimes the perforation is small, for example where the guiding wire has caused a small puncture, and this can be managed without surgery but will always require admission to hospital. If a stent is subsequently inserted, this may seal the hole and prevent problems developing.

These complications can normally be detected during or soon after the procedure and action taken.

**Stent insertion**

The nature of your condition and the technology which is being used to treat you are associated with complications in approximately 10% of patients.

These range from the less serious, including incorrect positioning of the stent (requiring stent repositioning), subsequent movement of the stent from its correct position (requiring stent repositioning) and minor bleeding. The more serious complications include perforation of the gullet or stomach, tearing of the lining of the gullet and bleeding. Sometimes the perforation is small, for example where the guiding wire has caused a small puncture, and this can be managed without surgery but will require admission to hospital.

Sometimes cancerous growths of the gullet can cause blockage of the stent at any stage following its insertion. This can normally be treated with further endoscopic procedures.

**3. Risks associated with intravenous sedation**

Sedation can occasionally cause problems with breathing, heart rate and blood pressure. If any of these problems do occur, they are normally short lived. Careful monitoring by a fully trained endoscopy nurse ensures that any potential problems can be identified and treated rapidly.
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Older patients and those who have significant health problems (for example, people with significant breathing difficulties due to a bad chest) may be assessed by a doctor before having the procedure.

**Preparation for the procedure**

**Eating and drinking**

It is necessary to have clear views and for this the stomach must be empty. Therefore do not have anything to eat for at least 6 hours before the test. Small amounts of water are safe up to two hours before the test.

If your appointment is in the morning have nothing to eat after midnight but you may have a drink at 6am.

If your appointment is in the afternoon you may have a light breakfast no later than 8 am and small amounts of water until 2 hours before your appointment time.

**What about my medication?**

Your routine medication should be taken.

**Diabetics**

If you are a diabetic controlled on insulin or medication please ensure the Endoscopy department is aware so that the appointment can be made at the beginning of the list. Please see guidelines printed in the back of the book.

**Anticoagulants/allergies**

Please telephone the unit if you are taking anticoagulants e.g. warfarin. Phone for information if you have a latex allergy.
How long will I be in the endoscopy department?
This largely depends upon how busy the department is. You should expect to be in the department for approximately 1-3 hours. The department also looks after emergencies and these can take priority over outpatient lists.

Patients who have complex procedures such as stent insertion may be admitted to hospital.

What happens when I arrive
When you arrive in the department you will be met by a qualified nurse who will ask you a few questions, one of which concerns your arrangements for getting home. You will also be able to ask further questions about the investigation.

The nurse will ensure you understand the procedure and discuss any outstanding concerns or questions you may have.

You may be receiving intravenous sedation and a painkiller. The nurse will insert a small cannula (small plastic tube) into a vein usually on the back of your hand through which the sedation will be administered later.

You will not be permitted to drive home or use public transport alone, so you must arrange for a family member or friend to collect you. The nurse will need to be given their telephone number so that she can contact them when you are ready for discharge.

You will have a brief medical assessment with a qualified endoscopy nurse who will ask you some questions regarding your medical condition and any past surgery or illness you have had to confirm that you are sufficiently fit to undergo the investigation.

Your blood pressure and heart rate will be recorded and if you are diabetic, your blood glucose level will also be recorded. Should you suffer from breathing problems a recording of your oxygen levels will be taken.
If you have not already done so, and you are happy to proceed, you will be asked to sign your consent form at this point.

**Intravenous sedation and pain relief**

The sedation and painkiller will be administered into a vein in your hand or arm which will make you lightly drowsy and relaxed but not unconscious. You will be is a state called co-operative sedation: this means that, although drowsy, you will still hear what is said to you and therefore will be able to follow simple instructions during the investigation. Sedation also makes it unlikely that you will remember anything about the procedure. You will be able to breathe quite normally throughout.

Whilst you are sedated we will check your breathing and heart rate so changes will be noted and dealt with accordingly. For this reason you will be connected by a finger probe to a pulse oximeter which measures your oxygen levels and heart rate during the procedure. Your blood pressure may also be recorded.

You are not permitted to drive, take alcohol, operate heavy machinery or sign any legally binding documents for 24 hours following the procedure and you will need someone to accompany you home.

**The therapeutic OGD procedure**

In turn you will be escorted into the procedure room where the endoscopist and the nurses will introduce themselves and you will have the opportunity to ask any final questions.

If you have any dentures you will be asked to remove them at this point; any remaining teeth will be protected by a small plastic mouth guard which will be inserted immediately before the examination commences.

The nurse looking after you will ask you to lie on your left side and will then place the oxygen monitoring probe on your finger. The sedative drug and painkiller will be administered into a cannula (tube) in your vein and you will quickly become sleepy.
Any saliva or other secretions produced during the investigation will be removed using a small suction tube, again rather like the one used at the dentist.

The endoscopist will introduce the gastroscope into your mouth, down your oesophagus into your stomach and then into your duodenum. Your windpipe is deliberately avoided and your breathing will be unhindered.

During the procedure samples may be taken from the lining of your digestive tract for analysis in our laboratories. These will be retained. Any photographs will be recorded in your notes.

**After the procedure.**

Unless specifically instructed otherwise, you will be allowed to rest for as long as is necessary. Your blood pressure and heart rate will be recorded and if you are diabetic, your blood glucose will be monitored. Should you have underlying difficulties or if your oxygen levels were low during the procedure, we will continue to monitor your breathing and can administer additional oxygen.

Once you have recovered from the initial effects of any sedation (which normally takes 30 minutes) it will be necessary to check that there are no immediate complications. This may involve you having a chest x-ray and being asked to swallow some water.

Depending upon your individual case you may be admitted to hospital, but you may be allowed home and before you leave the department, the nurse or doctor will explain the findings. Any medication or further investigations required and will also inform you if you require further appointments.

Since sedation can make you forgetful it is a good idea to have a member of your family or a friend with you when you are given this information although there will be a short written report given to you.

Having had sedation you may feel fully alert following the investigation, however the drug remains in your blood system
for about 24 hours and you can intermittently feel drowsy with lapses of memory. If you live alone, try and arrange for someone to stay with you, or if possible, arrange to stay with your family or a friend for at least 4 hours.

If the person collecting you leaves the department, the nursing staff will telephone them when you are ready for discharge.

General points to remember

● If you are unable to keep your appointment please notify the endoscopy unit as soon as possible.

● It is our aim for you to be seen and investigated as soon as possible after your arrival. However, the department is very busy and your investigation may be delayed. If emergencies occur, these patients will obviously be given priority over less urgent cases.

● The hospital cannot accept any responsibility for the loss or damage to personal property during your time on these premises.

● If you have any problems with a persistent sore throat, worsening chest or abdominal pain, please contact your GP immediately informing them that you have had an endoscopy.

● If you are unable to contact or speak to your doctor, you must go immediately to the hospitals accident and emergency department.
Guidelines for people with diabetes undergoing upper GI endoscopy (gastroscopy)

Adjusting therapy
As a diabetic you will need to adjust your treatment according to the timing of the appointment. As a result your blood sugar control may be a little higher than usual. This is only temporary to maintain your blood sugars through the procedure and you will be back to your usual level of control within 24 to 48 hours of the procedure.

Avoiding hypoglycaemia
To avoid hypoglycaemia, your medication will need adjusting the evening before the procedure and may need to be omitted or reduced on the morning of the procedure.

Dose adjustment advice
If you have concerns about adjusting your dosage, please contact the Diabetes Nursing Team on 01962 825301, well in advance of the appointment, to discuss appropriate measures.

Carrying glucose to treat hypoglycaemia
On the day of the procedure, carry Glucose Tablets in case of hypoglycaemia. As these are absorbed quickly through the tissues of the mouth, if sucked, they will not interfere with the procedure. Take three (3) tablets initially, followed by a further three (3) if symptoms continue after 5 minutes. If your medication has been adjusted this should not be a problem.

Blood glucose monitoring
If you usually test your blood sugar levels, check them as usual, on the morning of the procedure and carry your equipment with you to the appointment.

If you do not usually test your blood, do not worry, your blood levels will be checked when you arrive for the procedure.
**Instructions for your appointment**

Please check the appropriate section, type of treatment and time of procedure, for your appointment information

**Morning appointment**

**People on insulin**

- You should have nothing to eat after midnight but may have drinks up to 6.00am, if you feel hypoglycaemic take glucose tablets

- Make sure that you have planned changes to your insulin dose for the **evening before**. Reduce your evening insulin dose by a third. For example, if taking Mixtard 30 : 30 units at evening meal – reduce to 20 units If taking pre meal short acting insulin three times daily and 18 units. Insulatard(Basal) at 10pm; reduce the basal insulin to 12 units

- Do not take your **morning** dose of insulin; bring your insulin with you to have after the procedure

- If you are still in doubt contact the Diabetes Nursing Team

- Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time of your visit

- Your morning dose of insulin can be given as soon as you are able to eat and drink safely. The nursing staff will inform you when this is safe.
Afternoon appointment

People on insulin

● You should have nothing to eat or drink after 7.30am, if you feel hypoglycaemic take glucose tablets

● Make sure that you have made plans to reduce your **morning dose** of insulin. You will need to reduce the dose by half eg Mixtard 30 : 24 units am; reduce to 12 units. Actrapid 12 units with breakfast; reduce to 6 units with early breakfast

● If still in doubt ring the Diabetes Nursing Team for advice

● Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time during your visit

● Your next dose of insulin can be given as soon as you are able to eat and drink safely. The nursing staff will inform you when this is safe.

Morning appointment

People on diabetes tablets

● You should have nothing to eat after midnight but **may** have drinks up to 6.00am, if you feel hypoglycaemic take glucose tablets

● Make sure that you have planned changes to your tablet doses for the **evening before**. If you are taking Gliclazide or Glibenclamide reduce the evening dose by one tablet

● It is not necessary to reduce your Metformin dose eg Gliclazide 80mg + Metformin 500mg – **Do not take Gliclazide**
Glibenclamide 10mg + Metformin 850mg – **Reduce Glibenclamide to 5mg**

● Do not take your **morning** dose of tablets, but bring your tablets with you to have after the procedure

● If you are still in doubt contact the Diabetes Nursing Team.
● Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time during your visit.

● Your dosage of tablets can be given as soon as you are able to eat and drink safely – the nursing staff will inform you when this is safe.

**Afternoon appointment**

**People on diabetes tablets**

● You should have nothing to eat or drink after 7.30am, if you feel hypoglycaemic take glucose tablets.

● Make sure that you have made plans to reduce your **morning dose** of tablets. You need to stop your Gliclazide, glimepiride, glibenclamide, tolbutamide. If you are taking Pioglitazone (Starlix) or Rosiglitazone (Avandia) you should **stop** this tablet also; eg Gliclazide 80 mg + Metformin 500mg; do not take the Gliclazide. Glibenclamide 10mg + Metformin 850mg; do not take Glibenclamide.

● If still in doubt ring the Diabetes Nursing Team for advice.

● Report to the nursing staff if you have needed glucose before arriving and inform them immediately if you feel ‘hypo’ at any time during your visit.

Your dosage of tablets can be given as soon as you are able to eat and drink safely; the nursing staff will inform you when this is safe.
this leaflet was produced by:

Dr Hugh Shepherd FRCP MD MB BCHir
Consultant Gastroenterologist
***

Sue Cramp
Endoscopy Manager RGN, DipHM
***

Dr David Hewett MSc MFPHM MBCS MHSM
Assistant Medical Director (Risk and Litigation)

Endoscopy Department
Brinton Wing, Level C
Royal Hampshire County Hospital
Romsey Road
Winchester
Hampshire
SO22 5DG
Telephone: 01962 828322