

Duodenal Stent Insertion

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If you are unable to keep your appointment, please notify the Endoscopy Unit booking office as soon as possible.

Contact telephone numbers: Monday to Friday 08.00-18.00 hours

For appointments: please contact the Endoscopy Unit booking office on 01493 452690

For advice: please contact the Endoscopy Unit on 01493 452370

Introduction

Following your recent clinic appointment, visit to the doctors or inpatient assessment it has been recommended that you have a duodenal stent insertion.

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 will give you information about the procedure and its risks and benefits to help you make an informed decision about having the procedure.

This procedure requires your formal consent.

The consent form is a legal document. Once you have read and understood all the information, including the possibility of complications, and you agree to undergo the procedure, **you will be asked to sign and date a consent form.**

If there is anything you do not understand or wish to discuss further, do not sign the form until you have spoken to a healthcare professional.

Why do I need a duodenal stent?

The food you eat travels down your oesophagus (food pipe) and into your stomach where the digestion process starts by breaking down food to form a thick lumpy liquid. This mixture passes from the stomach into the duodenum (first part of your bowel). Your duodenum can become blocked, either by tumour within it or by tumour progression outside of it causing external pressure. As a result food cannot pass through as quickly, if at all. One way of overcoming this problem is by inserting a stent.

What is a duodenal stent?

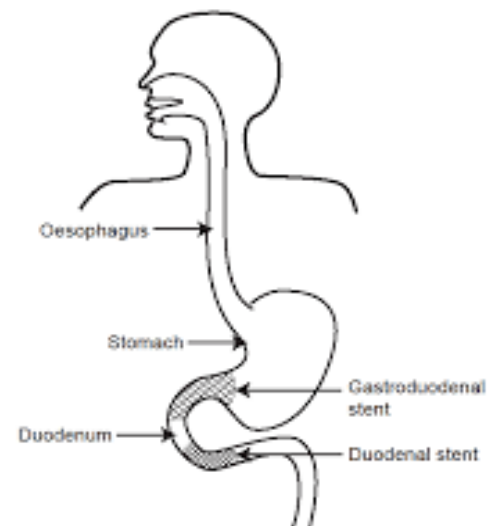
Stents are flexible hollow tubes usually which is woven into a mesh and may be covered in a plastic membrane.



Covered



Uncovered



What are the alternatives?

Unfortunately there are only limited alternatives to having a stent placed in the duodenum. The most common is bypass surgery to circumvent the blockage. Your doctors have decided that stent placement is the best treatment option.

What are the possible complications?

A. The endoscopic examination:

Serious complications are very rare.

The main risks include mechanical damage to teeth or bridgework. Mild discomfort in the abdomen and a sore throat, which may last a couple of days, are common side effects.

Placing the stent may cause a tear (or perforation) in the wall of the duodenum. This is very rare and is usually obvious at the time of the procedure. If this happens you will not be able to eat or drink for a few days and you will be given antibiotics until the tear heals. If the tear does not heal you may need a second stent or an operation.

The stent may take a few days to expand fully. There is a chance it may not expand fully even after a few days and you might still have difficulty managing food. If your symptoms persist you may need to have repeat procedure in the radiology department to place a small balloon within the stent to inflate it so that it expands fully.

Your symptoms may unfortunately return. This can happen for several reasons:

- Food may occasionally stick inside the stent causing a blockage. If this happens you may start to vomit and find that you are unable to keep food or drink down. You may need an endoscopy or repeat procedure to remove the food.
- The stent may slip out of position in the weeks or months after placement. The likelihood depends on whether the stent is covered and whether further chemotherapy is administered. If this happens, the stent can usually be resited or replaced.
- Your tumour may grow above or below the stent. This is treated by placing a fresh stent through the old stent, which will open up the duodenum again.

About one in ten patients have some abdominal pain after stent insertion. This can happen immediately after the stent has been placed and usually settles within 24 to 48 hours.

Despite these possible risks, the procedure is normally very safe and the benefit of the duodenal stent outweighs the possible risks.

B. Sedation:

This 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 an endoscopy nurse ensures that any potential problems can be identified and treated rapidly.

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 being treated.

Please note that occasionally the test may need to be abandoned or may be incomplete. In this case, the procedure may need to be repeated or we may suggest an alternative procedure.

Preparation for the procedure

Eating and drinking

The procedure must be performed on an empty stomach to reduce risk of vomiting so you must not eat or drink for six hours before the test (only sips of water are safe up to two hours before the test).

Blood Tests

You will need to have some blood tests one to two days before the procedure.

What about my medication?

Please bring a list of your medications with you to your appointment.

Diabetics

If you are diabetic please see the guidelines at the end of this booklet (page 9).

Anticoagulants

If you are taking anticoagulants e.g. warfarin or acenocoumarol, the anticoagulation nurse will contact you at least seven days prior to your appointment about stopping, or dosing, and arranging a blood test. On arrival to the endoscopy unit the nurse will test your blood to check your INR and advise on dosing after the procedure.

If you are taking direct oral anticoagulants e.g dabigatran, rivaroxaban, apixaban and edoxaban stop these two days (at least 48 hours) prior to your appointment.

If you have any concerns please contact the Endoscopy Unit for advice.

Anti-platelet agents

There is no restriction in taking aspirin or dipyridamole which can be taken as usual. If you are taking clopidogrel, ticagrelor or prasugrel **please stop these seven days prior to your appointment.** The referring doctor will tell you if you are required to take aspirin for that time period. However, if you have had a cardiac stent inserted in the last 12 months your consultant will need to discuss any changes to your medication with a cardiologist. If your consultant has not discussed this with you please ring the relevant secretary.

Other medication

You should continue to take all of your other medications as normal, unless you have been told otherwise by your referring doctor.

How long will I be in the department?

You can expect to be in the department for most of the day. You will not be able to eat for four hours following your procedure, this allows things to settle. After this time you will be offered something to eat (light, low fat) and drink. Providing you have no pain, nausea, or vomiting you will then be able to go home.

What happens when I arrive?

You will be met by an endoscopy nurse who will ask you a few questions, one of which concerns your arrangements for getting home.

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

You will have a brief medical assessment regarding your medical condition and any past surgery or illness you have had to confirm that you are sufficiently fit to undergo the procedure.

Your blood pressure, heart rate and oxygen levels will be recorded. If you are diabetic your blood glucose level may be checked.

You will then be asked to change into an examination gown. You are advised to bring a dressing gown with you, however, an over gown can be provided if necessary.

The nurse will insert a cannula into a vein, usually on the back of your hand, through which medication can be administered during the procedure.

The consultant will take consent for the procedure and enable you to ask any further questions.

Please inform the staff if you are or could be pregnant.

What happens during a duodenal stent insertion?

Before the procedure starts a nurse will attach you to monitoring equipment such as blood pressure and ECG (heart) monitors.

You may also have some local anaesthetic throat spray to help numb the throat.

You will then be asked to lie on your left hand side or on your stomach and a plastic mouth guard placed in your mouth.

You will receive oxygen throughout the test, usually through a plastic tube via your nose.

Duodenal stent insertion is usually a well-tolerated procedure. A sedative and pain relief is given through the cannula which will help you to relax and make you drowsy but will not necessarily put you into a deep sleep.

A duodenal stent insertion is a type of endoscopy that uses a camera and x-ray screening. A flexible, lighted tube (endoscope) about the thickness of your index finger is placed through your mouth, into your stomach and the first part of the small intestine (duodenum). Once in the duodenum the blockage is identified and dye (contrast material) is injected and X-rays are taken to study the extent of the stricture.

The stent is inserted via the endoscope and through the blockage, where it expands to open up the passage. This allows food to pass through from your stomach into the bowel without hold up.

What happens after the procedure?

You will be looked after in the recovery bay and nurses will check your blood pressure and temperature regularly for the first couple of hours and observe you for any complications.

You are allowed to drink once the sedation and throat spray have worn off. When you can comfortably manage drinks you should be able to build up slowly to foods with a soft and moist consistency (see page five).

If you experience any pain or feel unwell please inform a nurse who can assist with making you comfortable.

Either a doctor or nurse will explain the findings of the test and let you know the next stage of your treatment plan if necessary.

You may have a sore throat for about 24 - 48 hours

Report to A&E department if you experience persistent pain in the neck, chest, back or abdomen, if you develop a high temperature or experience ongoing sickness.

Contacts

If you need further advice please contact endoscopy on 01493 452370

Monday to Friday 08.00 – 18.00

General points to remember

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 procedure may be delayed. If emergencies occur, these patients will obviously be given priority over less urgent cases.

If you have any problems with persistent or worsening abdominal pain after your procedure, 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 can phone or attend the hospitals A&E department. You can contact them on **01493 452559**.

You may be given Buscopan® during this procedure – if on discharge you develop symptoms such as pain in the eye, blurred vision, haloes round lights, nausea or vomiting please report to A&E in case the eye pressure has gone up and needs treatment.

Privacy and Dignity

Please note we have single sex changing, recovery and toilet facilities available in the unit.

Please be advised that relatives are not permitted into the procedure room with the patient or into the recovery areas. This is to protect other patients privacy, dignity and enable staff to concentrate on looking after the patients.

Visit our website:

<http://www.jpaget.nhs.uk/departments-services/departments-services-a-z/endoscopy-unit/>

What can I eat?

Following your duodenal stent insertion it is important to follow the dietary advice below. This will help ensure that your stent is at less risk of becoming blocked.

It is important to have a fizzy drink following each meal as this will help to prevent the stent from blocking.

It is best to start by having clear fluids, then move onto 'sloppy foods', before building up to more solid food usually within two weeks.

The following guidelines will help you.

Day one - Day of insertion

You will need to have an x-ray done before you can eat or drink, to confirm the stent is working. This is usually done on the same day or the day following the stent insertion.

You will be advised by the doctor or nurse when you can start taking clear fluids, such as water, squash, fizzy drinks, Bovril, or Oxo.

Day two

Any fluids: tea, coffee, milky drinks, and strained soups, pureed and soft foods, eg:

Breakfast - soft cereals such as porridge or weetabix.

Main meal - pureed food i.e:- meat, vegetables, potatoes with gravy/sauce.

Desserts - pureed puddings, smooth milky puddings or ice cream.

Day three and four

You can now try to slowly increase the texture of your food eg: mashed fish in sauce, finely minced meat and mashed vegetables with plenty of sauce or gravy, mashed potatoes, smooth milky puddings, ice cream, jelly, yoghurt, sponge and custard.

Day five and onwards

Over the next week or so you will be able to find out what type and texture of food you can manage best.

The following guidelines will help you:

- Meals should be small and frequent - you may find three smaller meals with in-between snacks easier to manage. This is especially useful if you have a small appetite.
- Chew all your food thoroughly - it needs time to be completely lump free before swallowing. Take your time, eat slowly and relax. Avoid foods that are difficult to chew.
- Make sure that your dentures fit properly - see your dentist if your dentures are not comfortable. Do not remove them before eating.
- Sit as upright as possible when eating and immediately after eating.
- Take sips of fluids with your food.
- Speak to your doctor about medications. Some tablets can be crushed or may be available in a liquid form.
- Avoid eating close to bedtime.
- Use at least two pillows or raise the head of the bed.

Although you will be able to eat most foods there are some foods to be cautious with as they might get stuck in the stent.

These include:

Fresh doughy bread or crusty bread - try toast, day old bread and use plenty of butter or spread.

Fibrous, pithy or stringy fruits, salad and vegetables - be careful of celery, rhubarb, and citrus fruit segments. Try tinned varieties or make sure fruit and vegetables are cut and chopped into small pieces. Avoid raw vegetables, and peas/sweetcorn.

Tough meat - meat should be minced or cooked well to ensure that it is tender. Avoid gristly or fatty pieces of meat. Have plenty of sauce or gravy with meat.

Dry fish - try fish cooked in sauces such as cheese or parsley.

Avoid fish with bones and those cooked in breadcrumbs or batter.

Dry potatoes - avoid plain boiled or baked potatoes. Try potatoes with plenty of butter or sauces.

Nuts and crisps.

Cakes and biscuits containing dried fruit or nuts.

Coarse cereals such as shredded wheat, muesli, and crackers.

Hard boiled eggs unless mashed with plenty of salad cream or mayonnaise.

If food gets stuck try standing up, walk about, sip water or fizzy drinks. If it does not clear, do not panic: contact your Nurse Specialist, GP, the endoscopy department or your consultant's secretary.

Soft meal ideas

Breakfast

- Porridge or instant hot oat cereal
- Weetabix with hot or cold milk
- Other breakfast cereals without dried fruit or nuts (try leaving them to soften in the milk for 2-3 minutes before eating)
- Eggs - poached or scrambled
- Tinned plum tomatoes

Main meals

- Minced meats and gravy (beef, lamb, chicken, pork, turkey)
- Fish in sauce - try boil in bag variety
- Cauliflower cheese
- Corned beef hash
- Cheese and potato pie
- Macaroni cheese
- Pasta dishes - spaghetti bolognese

Serve meals with mashed potato and soft vegetables.

Snack meals

- Soup - home made or bought
- Omelette - try adding grated cheese
- Tinned spaghetti/baked beans
- Jacket potato and filling - butter, cheese, tuna & mayonnaise (scrape out the middle of the potato and leave the skin)
- You may be able to manage sandwiches made with soft fillings. Cut off the bread crusts if you find them difficult to chew.

Desserts

- Milk puddings - rice pudding semolina, custards
- Yoghurts and fromage frais
- Fruit fools and trifle
- Stewed fruit, soft fruit, including tinned fruit
- Egg custards
- Crème caramel
- Sponge puddings if served and mixed with plenty of custard

Nourishing drinks

Fortified milk

1 pint (500ml) full fat milk and 2oz/50g skimmed milk powder.

Gradually mix the milk into the powder, whisk with a fork until the powder has dissolved. Store in the fridge.

Milk shake

1/2 pint (250ml) fortified milk, 1 scoop of ice cream, milk shake flavouring or soft fruit e.g. banana, strawberries. Whisk all ingredients in a blender and serve chilled.

Yoghurt flip

1 glass full fat milk, 1 carton fruit yoghurt, sugar to taste. Whisk together and serve chilled.

Honey cup

1/2 pint (250ml) fortified milk (warmed), 2 teaspoons honey. Put honey in a cup and pour on the warm milk, stirring well.

Try to have 1-2 glasses of fruit juice daily to help increase your vitamin C intake.

Easy ways to build yourself up if you start to lose weight (and don't need to).

- Commercially prepared drinks such as Build-up or Complan are widely available, and may be available on prescription from your GP. Also try Horlicks, Ovaltine, or hot chocolate.
- Sugar - unless you have diabetes, use lots. Add to drinks and desserts. Check that squashes and fizzy drinks are of the ordinary variety and not low calorie versions.
- Cheese - try adding to potatoes, soup, sauces, and scrambled eggs.
- Cream, butter or milk - add to foods, pour into soup, sauces, and puddings.
- Alcohol - if your doctor has no objections, a small glass of alcohol may help to stimulate your appetite.

If you require further dietary advice please contact the department of Nutrition and Dietetics at the James Paget University Hospital. Contact number: 01493 452381.

If you have any further concerns following your stent insertion please do not hesitate to telephone the endoscopy department or your nurse specialist.

Guidelines for people with diabetes on medication undergoing a Duodenal Stent Insertion

As a person with diabetes, you need to adjust your treatment according to the timing of the appointment. As a result your blood sugar 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 – 48 hours of the procedure.

Carrying glucose to treat hypoglycaemia (low blood sugar)

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 tablets initially, followed by a further three if symptoms persist after five minutes. If your medication has been adjusted, this should not be a problem.

Alternatives to glucose tablets

Lucozade Sport 200mls (13 tablespoons)
Grape juice 100mls (6 tablespoons)
Sparkling apple juice 200mls (13 tablespoons)
Coke or Pepsi (not diet) 200mls (13 tablespoons)
Ribena 30mls (2 tablespoons) diluted
Squash / barley water 70mls (4 tablespoons) diluted
Sugar 4 teaspoons dissolved in 200mls of water

Blood glucose monitoring

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

Patients taking tablets for diabetes or non-insulin injectable treatment (Exenatide, Lixisenatide, Liraglutide, Dulaglutide)

Omit your tablets / injectable treatment on the morning of the appointment but bring them with you so that you can take them after the appointment once you are eating and drinking.

Inform the endoscopy nurses if your blood glucose has been low and you have needed to take hypoglycaemia treatment.

Patients taking insulin for diabetes

Do not have breakfast.

If you use basal insulin (Insulatard / Humulin I / Insuman Basal / Levemir / Lantus / Abasaglar / Tresiba) take **half** the usual dose the evening before (if you take an evening dose) and/or on the morning of (if you take a morning dose).

If you use an insulin pump, reduce the basal rate to 50% usual from 10pm the night before the procedure.

If you use quick acting insulin (Actrapid / Humulin S / Insuman Rapid / Novorapid / Humalog / Apidra / Fiasp) **omit** the dose on the morning of the procedure but bring the insulin to take once you are eating and drinking.

If you use mixed insulin (Humulin M3 / Insuman Comb 15 / Insuman Comb 25 / Insuman Comb 50 / Novomix 30 / Humalog Mix 25 / Humalog Mix 50 / Hypurin 30/70) the evening before the procedure, reduce the dose by one-third (e.g. if you usually take 12 units then take 8 units).

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

You can take your regular dose of insulin as soon as nursing staff tell you that you can safely eat and drink.

If you have any concerns about adjusting dosage, contact the Diabetes Nursing Team on 01493 453373 (answer phone).

This booklet was produced by:

The Endoscopy Team and The Endoscopy Patient Participation Group at the James Paget University Hospitals NHS Foundation Trust.

Diabetic patient information ratified by Dr Joanne Randall, Consultant Endocrinologist.

This booklet was adapted from original documents produced by The Christie NHS Foundation Trust.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

TRUST VALUES: We CARE for...
our patients... each other... ourselves

BEHAVIOURS:
Courtesy and respect
Attentively kind and helpful
Responsive communication
Effective and professional



IN TRAN
communication for all

The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240