Having a stent in the stomach or small bowel (pyloric or duodenal stent)

	November 2024
Review:	November 2027
Leaflet nun	nber: 110 Version: 2

Introduction

This leaflet tells you about the procedure called pyloric or duodenal stent insertion. Please read it carefully as it has important information and instructions.

What is a stent insertion of the stomach or small bowel?

The food you eat goes down your food pipe (oesophagus) into the stomach and then into the small bowel. If the stomach or small bowel becomes blocked, there can be a hold up of food. This can cause problems such as being sick (vomiting).

This problem can be treated by putting in a metal mesh tube called a stent. This is put in down the food pipe, through the part of the stomach called the pylorus, into the first part of the small bowel (duodenum). The stent goes past the blockage to hold the bowel open. Food can then pass through the stent. This procedure is called a pyloric or duodenal stent insertion.

Why do I need a stent in my stomach or small bowel?

Other tests that you may have had done, such as endoscopy (telescope test) or a barium meal, have shown that your stomach or small bowel is blocked. This is stopping food going through.

Your doctor will have talked to you about the most likely cause of your blockage and the possible treatments. It is likely that an operation is not best for you and your doctor has decided a stent is a better treatment option for you.

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



How do I get ready for my procedure?

You will need to stay in hospital as an inpatient to have this procedure done.

You may not be eating and drinking because of your symptoms. If you are still eating and drinking, **do not have anything to eat or drink for 6 hours before your procedure.**

- Bring all your usual medication with you.
- Bring an overnight bag with things like toiletries and slippers. You may wish to bring a book or magazine to read. You will stay in the hospital overnight.

Important information about blood thinners:

If you are taking medicine that thins the blood (anticoagulants or antiplatelets) it may need to be stopped or replaced with a different one for a few days.

Please call the radiology department for advice as soon as possible. The phone number to call is on your appointment letter and at the end of this leaflet. You will be asked what blood thinning medicine you are taking, how much you take (the dose), and what you are taking it for.

Common examples of these drugs include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto), edoxaban (Lixiana), ticagrelor (Brilinta), Dalteparin and Heparin.

You may have already been given instructions on blood thinners by the doctor who referred you for this procedure. Please still call the radiology department so we can check this.

Asking for your permission (consent)

The doctor who referred you should have talked to you about the reasons for this procedure and any other options.

You have been referred to a hospital doctor or a doctor who specialises in imaging and X-ray treatments (a radiologist) for this procedure. They will confirm that you understand:

- why the procedure is being done
- the potential risks
- the chances of success

You will sign a consent form to confirm this. You should feel that you have had enough explanation before you sign the consent form.

If after talking to the hospital doctor or Radiologist you do not want to have the procedure then you can decide against it at any time. If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so to help you fully decide.

If the radiologist feels that your condition has changed they will talk to you about whether the procedure is still needed. They may ask for the doctor who wanted you to have the procedure to talk to you and review your condition.

What happens when I come for my procedure?

When we are ready for you, you will be taken on your hospital bed to the radiology department for your procedure.

- A radiology nurse will ask you some questions and confirm your details.
- Please tell the nurse if:
 - You are allergic to iodine or rubber (latex), or have any other allergies to anything including medications, skin cleaning liquids or foods.
 - You have asthma.
 - You have had a reaction in the past to a contrast liquid injected into a vein (intravenous contrast), the dye used for kidney X-rays and CT scanning and X-rays of your heart and blood vessels.
 - You are on renal dialysis or have any problems with your kidneys.
 - You have diabetes.
 - There is any chance that you may be pregnant.
- You will be asked to take off some of your clothes and put on a hospital gown and disposable pants.
- A small needle (cannula) will be put into a vein in your arm so you can be given medication if needed.
- When we are ready for you, you will be taken into the procedure room and introduced to our radiology team.

Who will be doing my procedure?

- A doctor who specialises in imaging and X-ray treatments (an interventional radiologist) will do the procedure.
- There will be a radiographer who will move and control the special X-ray equipment.
- There will also be a nurse and maybe a healthcare assistant to work with the radiologist and care for you.
- As we are a teaching hospital, a student may also be in the room. If you do not want this, you can ask that a student is not in the room when you have your procedure.
- Sometimes we may ask for the team who specialise in doing camera tests inside the body (endoscopy team) to help with the procedure.

What happens during my procedure?

- Your procedure will be done in the radiology department.
- We ask you to lie down on the X-ray table. At the start we ask you to lie on your side. During the procedure we will ask you to turn to lie on your back. The radiologist will tell you when to do this.
- Please try not to move during the procedure. If you feel uncomfortable or need help, please tell the nurse so they can help you.
- We put a blood pressure cuff (strap) on your arm. We put a small peg on your finger and some special stickers (ECG stickers) on your chest or back. These will all be attached to a monitoring machine to check your blood pressure, your heart rate and your heart health.
- You may be given a sedative to help you feel more relaxed. You may also be given painkillers. These are given to you through the cannula in your arm.
- We may give you oxygen. If this happens you will have an oxygen mask or oxygen tube over your nose.
- We spray some local anaesthetic to the back of your mouth (throat) to make it feel numb. This helps to make the next part of the procedure more comfortable.
- We put a tube (catheter) with a thin guide-wire down your throat. We will ask you to swallow to make it easier for this to pass all the way down. We then push the catheter further into your stomach and through the blockage.
- We put a colourless liquid (contrast) that shows up on X-rays through the catheter. This is so the radiologist can see where the tube and the blockage are on the X-ray pictures.
- When the catheter and guide-wire are in the correct position through the blockage, we take the catheter out. We put a plastic mouth guard in your mouth. This is to protect the stent from getting damaged by your teeth.
- We put the mesh tube (stent) over the guide-wire and into the correct position across the blockage. We then release the stent. This makes the stent open up the blockage. We will ask you to keep still when we are putting the stent in place.
- You might feel some discomfort in your tummy (abdomen) when the stent is opening up but this should not be too sore.
- If the procedure becomes painful you should tell the member of staff who will be with you throughout the procedure. They may be able to arrange for you to have more painkillers.

How long will my procedure take?

- Every patient's situation is different. It is not always easy to know how difficult or how straightforward the procedure will be.
- The procedure usually takes 45 to 60 minutes but can take longer.

What happens after my procedure?

- You will be taken back to your ward.
- Nurses will carry out routine observations, such as taking your pulse and blood pressure. They may also check your temperature. This is to make sure that there are no problems.
- You will stay in bed for a few hours until you have recovered.

When can I eat and drink after my procedure?

You will be given a booklet about the sorts of foods you can and cannot eat.

For the first 4 hours after your procedure:

You will not be able to eat or drink for 4 hours after the procedure. After 4 hours, you follow 3 stages of eating and drinking.

Please see the information below and on the next page.

Please follow the food advice from the dietitian and the eating and drinking advice leaflet after you have had your stent.

Stage 1: Fluids only (nothing for the first 4 hours, then fluids only for 24 hours)

You will not be able to eat or drink for 4 hours after the procedure. After this time, your doctor will tell you that you can start to drink clear fluids and then move on to other fluids such as tea, coffee, milk and soup.

You should initially avoid acidic fluids such as fruit juice as these may cause discomfort after the procedure.

Stage 2: Semi - solid foods (after 24 hours, follow this stage for 1 or 2 days)

After 24 hours, if you have been able to manage drinking fluids you can then move onto stage 2 which is semi-solid foods. Start to include foods such as jelly, smooth yoghurts, mousse, custard, Ready Brek®, smooth soups, milky drinks and any nutritional supplement products (if you are already prescribed these).

You should follow stage 2 and have semi-solid food for 1 to 2 days. If you manage these smooth foods well you can move on to stage 3.

Stage 3: Softer mashed foods (to continue long term)

This is the final stage. Softer mashed foods should have a soft/tender texture and be able to be squashed/broken apart with a fork.

If you struggle to move to stage 3, please ask your doctor or nurse to refer you to a dietitian who can provide you with more support and advice.

A softer mashed diet should be continued long term.

You will be given a leaflet about the sorts of foods you can and cannot eat.

On the ward, you will be advised to order meals from the level 5 (minced and moist) and level 6 (soft and bitesize) menus.

Here are some helpful tips for eating:

- Chew food well. It should be smooth with no lumps before swallowing. If there are any lumps left, do not be afraid or embarrassed to spit these out. To help with this, cut up food into small pieces and have small mouthfuls at a time.
- Have food with plenty of sauce to make it moist and easier for you to swallow.
- Eat small portions more often. Aim to eat a small amount 5 to 6 times a day.
- Do not rush meals. Sit down for your meal. Sit upright when you eat and stay sitting for 30 minutes after eating.
- Have a drink with your meal (water, squash, tea, fizzy pop). Take small sips while you are eating and after your meal. This will help the food move through the stent and keep it clear.
- If you wear dentures, make sure they are fitted correctly so you can chew properly. If they do not fit well, speak to your dentist.

What if I feel my stent is blocked?

If you feel that your stent has become blocked:

- Stop eating. Have small sips of a warm drink. Walk around.
- If it still feels blocked after 1 or 2 hours, contact your GP, your specialist nurse (if you have one) or call the NHS helpline on 111.

If you had sedation please follow the advice below:

For 12 hours:

• you must have a responsible adult with you.

For 24 hours:

- you should have 24 hours off work.
- you should not be responsible for dependent children or adults in your care. You should have another adult to care for them.
- do not drink alcohol.
- do not drive a car (vehicle) or ride a bicycle.
- do not use any machinery or sharp tools or do anything needing skill or judgement.
- do not make important decisions or sign any documents.
- do not climb ladders or anything you could fall from.
- do not lift heavy items or do any strenuous exercise.

Are there any risks or complications?

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet, although they are different for each person. Your risks will be discussed with you before you sign the consent form.

- **Failure to place the stent:** sometimes the tumour or blockage can be too long, too tight or too far from the mouth to allow successful placement of the stent. You will be told straight away if the procedure has not been successful.
- **Failure to relieve symptoms:** sometimes despite putting the stent in, there may still be problems with eating and/or vomiting. You may also find that your appetite does not return to normal. 85 in every 100 patients (85%) get improved symptoms after successful stent placement.
- **Bleeding:** bleeding can happen in around 3 to 8 in every 100 patients (3 to 8%). This generally stops without the need for any action. Serious bleeding is less common (less than 1 in 100 patients).
- **Pain:** most people will have some discomfort in the abdomen for a few days after the stent is put in place while the stent "beds in". This normally settles by itself.
- Stent stops working (dysfunction) usually due to movement or blockage: this may happen in about 1 in 5 patients (20%) who have this procedure. The stent may move or block over time due to other treatment your are having. It could also happen if the illness that first caused the blockage continues to get worse (disease progression) or if food gets stuck (impaction). Sometimes this can be treated with endoscopy (a procedure when a camera is passed down the food pipe) or by putting in another stent.
- Hole in the bowel (perforation) putting the stent in may cause a tear to the wall of the stomach or small bowel. This is a serious condition and is usually obvious at the time of procedure. If it happens you may need an operation or another stent. This may happen in less than 2 in 100 patients (less than 2%).
- **Broken stent (stent fracture):** sometimes the stent can break. This happens because the normal movements of the bowel bend and flex the stent many times. This could happen to between 1 and 5 in 100 patients (up to 5%). If this happens, a camera test (endoscopy) or surgery may be needed to remove the broken stent. The procedure may be done again to put in a new stent.
- **Reaction to anaesthetic throat spray:** Some patients may be allergic to the throat spray used to numb the throat.
- **Reaction to contrast liquid** Some patients may be allergic to the contrast liquid and may have symptoms such as feeling or being sick (nausea or vomiting), or a rash. If you get any of these symptoms at the hospital, tell the doctor, nurse or other staff looking after you. If you develop symptoms at home you should contact your GP or call 111.
- **Risk of death:** there is a risk of death after a pyloric / duodenal stent procedure. This rate is less than 2 patients in every 100 stent procedures performed (less than 2%).



What are the risks from exposure to radiation in this procedure?

The main risk from exposure to X-rays is a higher risk of getting a cancer in the future. This risk is thought to be very small.

We are all exposed to natural background radiation every day of our lives. This comes from the sun, the food we eat, and the ground. Each test that uses X-rays gives a dose on top of this natural background radiation.

The risks of radiation are slightly higher for an unborn child. We must ask all patients age 10 to 15 years registered female and all patients aged 16 to 55 years about their periods and/or possibility of being pregnant.

The benefits of having this test are likely to outweigh any possible risks. The risks of not having the test could be greater. We try to keep your exposure to X-rays as low as possible.

What if I need to talk to someone?

During the procedure a member of staff will be with you for the procedure to reassure you.

After the procedure you may talk to the doctors or nurses in the radiology department or on the ward.

Contact details:

- If you have any questions about your stent after you have gone home, you can call the Macmillan Upper Gastrointestinal Cancer Nurse Specialist on **0116 258 5809**.
 - If you have any problems when you go home please contact 1 of the following:
 - the ward you were discharged from
 - your GP surgery

LEICESTER'S

- the NHS Helpline on 111

You will be given a leaflet about what to eat when you have a stent. This will have more contact phone numbers you can use when you are at home.

اگر آپ کو یہ معلومات کسـی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةٍ أُخرى، الرجاء الاتصال علی رقم الهاتف الذي يظهر في الأسـفل જો તમને અન્ય ભાષામાં આ માફિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ `ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ। Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk