Department of Nutrition and Dietetics
Radiology department

Information for patients referred for oesophageal stent insertion

Introduction
This leaflet tells you about having an oesophageal stent. It explains what is involved before and after insertion, including the benefits, risks and dietary advice. It may make you think of things you would like to discuss with your doctor.

Why do I need an oesophageal stent?
The oesophagus (gullet) is a hollow, muscular tube which takes food from the mouth down to the stomach. If it becomes blocked by a tumour or narrowed following radiotherapy (stricture) this causes a problem with swallowing. One way of overcoming this problem is by inserting a tube (stent).
What is an oesophageal stent?

Stents are flexible hollow tubes usually made of a thin metal wire which is woven into a mesh and, in most cases, covered in a plastic membrane. It is inserted down the oesophagus and through the blockage, where it expands to open up the passage. This allows food to pass through this stent.

Types of metal stent used at The Christie

For special situations, biodegradable (soluble) stents may be used which dissolve over a period of 3-4 months. Your doctor or specialist nurse will explain which stent is most appropriate for you.

Biodegradable stent

Where will the procedure take place?

A specialist doctor called an interventional radiologist will insert your stent in the radiology department (department 34).

How do I prepare for an oesophageal stent insertion?

You must let your doctor know if you:

• have any allergies, in particular to local anaesthetic or X-ray dye
• have had a previous reaction to intravenous contrast medium (the dye used for some X-rays and CT scanning)
• are on any medication to thin your blood, for example warfarin, clopidogrel, clexane or aspirin.

You will need to be an inpatient in hospital (usually an overnight stay). We will ask you not to eat for 6 hours before the procedure, though you may drink clear fluids up to 2 hours beforehand. We will ask you to put on a hospital gown for the procedure.
What actually happens during an oesophageal stent insertion?

The procedure is similar to a camera examination of the oesophagus (endoscopy/gastroscopy) except that the tubes used are smaller than a camera. At The Christie all procedures are performed under X-ray control without endoscopy.

- We will ask you to remove any false teeth, glasses or contact lenses.
- The back of your throat will be sprayed with lidocaine (a local anaesthetic). This will numb your throat for the duration of the procedure.
- You will lie on the X-ray table, generally on your stomach. You will have a cannula (needle) placed in a vein in your arm, so that you can be given a sedative and some painkillers. The sedative will make you feel sleepy. A mouth guard will be placed in your mouth to keep it open during the procedure to allow the radiologist to work. Throughout the procedure your pulse and blood pressure will be monitored and you will be given extra oxygen through small tubes in your nose.
- When you are sleepy a fine tube is passed through your mouth down your oesophagus and through the blockage. You may gag slightly; this is quite normal and will not interfere with your breathing. A wire is then placed through this tube and the tube is removed. The stent is then passed over this wire into the correct position and the stent is released to expand. The wire is then removed leaving the stent in place.
- The whole procedure takes approximately 30-45 minutes.

Will it hurt?

We will give you painkillers and sedation, so you should not feel much discomfort during the procedure. About 1 in 10 patients have some chest pain after stent insertion. This can happen immediately after the stent has been placed and usually settles within 24–48 hours.

If you do feel any pain, you should ask your ward nurse for regular painkillers to keep it under control.

What will happen afterwards?

You will be taken back to the ward on a trolley once you are awake. Your ward nurse will carry out routine observations, such as your blood pressure and pulse. You will generally stay in bed for a few hours, until you have recovered.

How soon can I eat and drink?

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 smooth texture/consistency (see below).

How long will the stent stay in?

The doctors looking after you will discuss this with you. It may only need to stay in a short time, or the stent may need to stay in permanently. If you have a biodegradable stent inserted it will dissolve in approximately 3-4 months. You may be offered another stent insertion if your symptoms persists.
Are there risks or complications?

Oesophageal stent insertion is a very safe procedure, but there are some risks and complications, as with any medical treatment.

- Pain which can be controlled with medication.
- A little bleeding may occur during the procedure and you may vomit a small amount of blood. This generally stops on its own.
- Heartburn which can be controlled with medication.
- Placing the stent may cause a tear (or perforation) in the wall of the oesophagus. 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 not expand fully and you might still have difficulty swallowing. This is treated in the radiology department by placing a small balloon within the stent and inflating it so that the stent expands fully.
- Your swallowing problems may return. This may 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 to remove the food.
  - the stent may slip out of position in the weeks or months after placement. This occurs in about 1 in 15 patients. The stent can be re-sited or replaced.
  - your tumour may grow above or below the stent. This is treated by placing a fresh stent through the old stent, which opens up the oesophagus again.

If you develop any of these problems you must contact your doctor at The Christie or the radiology department. If this happens in the middle of the night contact them the following day. If this happens at the weekend you can contact The Christie Hotline on: 0161 446 3658 or your GP, or visit your local hospital Accident & Emergency department. See contacts at end of this information.

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

What are the alternatives?

Unfortunately there are only limited alternatives to having a stent placed in the oesophagus. Your doctors have decided this is the best treatment option.

What happens next?

Depending on how well the stent has overcome the blockage, you will be encouraged to increase the amount you eat and drink. You will be discharged home once any pain is under control and you are able to eat. If you do experience severe pain or no improvement in your swallowing in the first 24 hours after the stent insertion you may need to go to the radiology department to investigate why. This will involve swallowing some fluid containing an X-ray dye whilst the doctor checks the position of the tube, whether it is fully opened and whether food or fluid is able to pass through. We will tell you the results straight away and also tell you if you are able to eat or if the tube needs repositioning.
What can I eat?

- Once the stent has been placed, it is advisable to start with fluids. When you can comfortably manage drinks, you should be able to build up slowly to foods with a smooth consistency.
- It is vital to eat slowly and chew your food thoroughly, to make sure it is a smooth consistency before swallowing.
- If you wear dentures, make sure that they fit well so that you can properly chew your food.
- Having sips of fluid during meals and at the end will help to keep the stent clean and reduce the risk of stent blockage.
- Sit upright at mealtimes and for at least half an hour afterwards.
- Add sauces, gravy or custard to your meals as this will make your food moist and easier to swallow.
- Certain foods may block the tube and will need to be avoided. The table below provides some further guidance.

<table>
<thead>
<tr>
<th>Food group</th>
<th>Foods to CHOOSE</th>
<th>Foods which may BLOCK your tube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast cereals</td>
<td>Porridge/oat based cereals. Cereals (no dried fruit/nuts) with plenty of milk.</td>
<td>Cereals with dried fruit/nuts, e.g. muesli.</td>
</tr>
<tr>
<td>Fish</td>
<td>Flaked fish in a sauce (remove all bones). Poached/steamed fish with sauce.</td>
<td>Battered fish or dry fish. Fish bones. Fish skin.</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Well-cooked vegetables.</td>
<td>Raw vegetables. Stringy vegetables, e.g. celery, French beans. Vegetables with tough or coarse skins/husks, e.g. sweet corn. Green salads</td>
</tr>
<tr>
<td>Fruit</td>
<td>Peeled fruit. Tinned fruits.</td>
<td>Tough or hard fruit skins, pips, pith and raw/hard fruit. Dried fruit.</td>
</tr>
<tr>
<td>Cheese</td>
<td>Grated cheese. Cottage cheese. Cream cheese.</td>
<td>Any varieties that contain nuts or hard fruits.</td>
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<tr>
<td>Eggs</td>
<td>Omelette, scrambled, poached or mashed eggs.</td>
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<tr>
<td>Snacks</td>
<td>Biscuits dipped in hot drinks. Crisps that ‘melt in the mouth’ e.g. Skips, Quavers, Wotsits. Boiled sweets/chocolate sucked until disappeared.</td>
<td>Hard biscuits with dried fruit/nuts or hard crisps.</td>
</tr>
</tbody>
</table>
Ideas for meals

Breakfast
- porridge/instant oat cereal made with milk or cream
- wheat biscuits or breakfast cereals (avoid any with nuts/dried fruit) soaked in milk
- skinless sausages with baked beans
- yogurt/fromage frais with mashed banana, stewed apple or pear
- omelette, scrambled, fried or poached eggs
- soft fruit such as banana, stewed apple or pear

Savoury snacks or main meals
- smooth, blended or strained soup with cream
- macaroni cheese or ravioli
- baked beans or tinned spaghetti
- jacket potato (without skin) with filling e.g. cream cheese, cottage cheese or grated cheese, tuna or egg mayonnaise, bolognese
- tender meat with gravy
- cottage/shepherds’ pie
- fish pie/fish in a sauce
- chicken/beef stew (tender meat, cooked slowly)
- pasta dishes such as spaghetti bolognese with plenty of sauce
- corned beef hash
- tofu, quorn or soya mince in gravy/sauce
- cauliflower cheese
- soft well cooked vegetables
- vegetable curry or other rice based dishes
- mashed potatoes

Desserts
- milky puddings: rice puddings, semolina, tapioca, custard
- trifle
- stewed fruit with custard, cream, condensed/evaporated milk
- yogurt/fromage frais
- egg custard/crème caramel
- ice-cream/sorbet
- sponge and custard
- mousse/blancmange/Angel Delight/fruit milk jelly
- pots of smooth desserts
- biscuits which soften when dipped in a hot drink
- moist sponge cake

If you have diabetes?
The advice given above includes foods containing high levels of sugar and fat. We advise you to consult your doctor, dietitian or diabetes nurse for individual advice as some of the recommended foods and drinks may not be suitable for you.
What if my stent blocks?
If you feel that your stent has become blocked:
• try not to panic
• stop eating
• stand upright and take sips of fluid
• if it remains blocked contact your doctor or specialist nurse.

If you need further ideas or advice on soft dietary options or find your appetite has decreased please ask for a copy of The Christie booklets:
• Eating a regular, easy to chew diet
• Nutritional products – availability of nutritional drinks, powders and puddings

Contacts
Stent-related problems
If you have any questions or worries please contact from 9:00am to 5:00pm:
Radiology nurse on: 0161 446 3333 or radiology department on: 0161 446 3325

Out of hours and at weekends (for emergencies):
Call The Christie Hotline on: 0161 446 3658

Further dietary information is available from the following:
Department of Nutrition and Dietetics
The Christie NHS Foundation NHS Trust
Contact: 0161 446 3729

Other useful contacts
Macmillan Cancer Support:
Specialist nurses provide information and support by telephone, email and letter. They publish booklets and factsheets on all aspects of cancer and its treatment.
Visit www.macmillan.org.uk or call: 0808 808 00 00

Oesophageal Patients’ Association
Provides information leaflets and support by former patients.
Call: 0121 704 9860 or visit www.opa.org.uk. Email: enquiries@opa.org.uk

Cancer Research UK
Provides facts about cancer including treatment choices.
Call: 0808 800 4040 or visit www.cancerresearchuk.org/about-cancer/

British Society of Interventional Radiology
Visit: www.bsir.org/patients/patient-information-leaflets
If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact patient.information@christie.nhs.uk

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for urgent support and specialist advice

**The Christie Hotline: 0161 446 3658**
Open 24 hours a day, 7 days a week