

Having a chest drain inserted

This leaflet explains about having a chest drain inserted to drain fluid or air from your chest.

If you have any further questions or concerns, please do not hesitate to contact the Pleural Team (contact details on page 4).

What is chest drain?

A chest drain is a tube that is inserted into the chest and sits in the space between the lung and the chest wall. This space is lined by a membrane (thin layer) called the pleura, and is known as the pleural cavity or pleural space.

This procedure is usually carried out to remove air, fluid or pus that has collected in the pleural space.

Why do I need a chest drain?

You will need a chest drain if you have an air leak (pneumothorax), a collection of fluid (pleural effusion) or a collection of pus (empyema) in the pleural space. Any of these can cause problems with breathing and can stop the lungs from working properly. The chest drain will allow the fluid or air to leave the body and allow your lungs to re-expand.

How is a chest drain inserted?

You will either sit with your head and arms resting on a pillow on a table, or lie on your bed with one arm above your head. We will carry out an ultrasound scan of your chest, and mark an appropriate safe site to insert the chest drain.

We will take precautions to minimise infection. We will inject a local anaesthetic to numb the area; this can sting temporarily, but resolves quickly.

We then make a small cut in the anaesthetised area. The doctor will gently insert the chest drain tube through this cut. It is normal to feel a sensation of pressure and tugging as the drain is inserted.

We will hold the chest drain in place with stitches and cover the site with a special dressing.

Once the chest drain is inserted we will connect it to a bottle that contains water. The fluid or air then travels down the tube and into the bottle. The water acts as a seal, preventing air or fluid coming back up the tube into your chest.

We will monitor your chest drain regularly. We will give you regular pain relief if you need it while the drain is in place. Pain may restrict your movement and breathing, which may prolong

the time your lung takes to expand, so it is important that you let us know if you are in pain, so we can keep it under control.

Occasionally a lung needs some help to re-expand. In this case the drainage bottle can be connected to a suction unit using a long piece of tubing. The gentle suction provided will help the lung re-expand.

Will it be painful?

We will inject local anaesthetic into the skin and the pleura before the procedure. It is generally painless, and we will give painkilling medication to control any pain after the procedure.

Looking after your chest drain

As the fluid or air around the lung drains you should be able to move more easily. There are a few simple rules that you can follow to minimise any problems:

- You can walk around with a chest drain but you must remember to carry the drainage bottle with you.
- Always carry the bottle below the level of your waist. If it is lifted above your waist level fluid from the bottle may flow back into the pleural space.
- If the drainage is on suction to encourage lung re-expansion, you will have to remain close to your bed, as the suction tube will limit your movement. While in bed, keep the drainage bottle on the floor.
- Do not pull on your chest drain or tangle it around your bed.
- Do not leave the ward.
- If your chest is painful tell your nurse.
- If you feel your tube may have moved or may be coming out tell your nurse. Inform your nurse if you feel any increased shortness of breath or have any other concerns.

When will the drain be removed?

The chest drain will need to stay in between few hours and a few days depending on how well you respond to treatment. During this time you may have several chest X-rays to check on how well the air or fluid is draining.

Removing the drain is a simple procedure. We remove all the dressings gently pull the drain out. The doctor or nurse may ask you to breathe in a particular way while the drain is removed. This can feel a little uncomfortable but only lasts a few seconds.

If you experience discomfort after the drain has been taken out you can take simple painkillers. If you develop any other worsening symptoms (lots of pain, difficulty breathing or a temperature) you must tell the doctors and nurses.

What are the risks involved with chest drains?

In most cases the insertion of a chest drain is a routine and safe procedure and most people find breathing is much easier once the chest drain is in place. However, like all medical procedures, chest drains can cause some problems.

- **Chest drains sometimes fall out and need to be replaced** – The drain may be stitched in place and is always covered with a firm dressing to help to prevent this. You can reduce the

likelihood of this happening by following the suggestions above ('Looking after your chest drain').

- **Pain** – Most people experience some discomfort from their chest drain but painkilling medication should control this.
- **Infection** – Sometimes chest drains can become infected but this is uncommon (about 2% of patients). Thorough cleaning of the skin before putting in the chest drain and a good aseptic technique will help to prevent this. If you feel feverish or notice any increase in pain or redness around the chest drain, tell your nurse or doctor.
- **Bleeding** – Serious bleeding is rare. Around 2% of patients may develop significant bleeding during tube insertion.

Asking for your consent

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

Contact us

If you have any questions or concerns about chest drain insertion, please contact the Department of Respiratory Medicine at St Thomas' Hospital Monday to Friday 09.00 – 17.00. Out of hours or in emergency please contact your General Practitioner or local accident and emergency department.

t: 020 7188 5821

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership