Having pleurodesis via a chest drain

This leaflet explains about having pleurodesis, a procedure to seal the space between your lungs and chest wall, to stop fluid collecting there.

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

What is pleurodesis?
The space between the lung and the chest wall is known as the pleural cavity or pleural space. The pleural space consists of two thin membranes, one lining the lung and the other lining the chest wall. These layers lie very close together and usually have a very small amount of fluid in the cavity (15–30ml). In your case a larger amount of fluid has collected in this space so the lung cannot work properly, making you short of breath.

Sealing this space to prevent fluid returning is called pleurodesis. This is done by putting a mildly irritant drug into this space.

How does pleurodesis work?
The drug that is put into your pleural space will cause irritation, both to the lining of the lung and to the chest wall. This causes the surfaces to become sticky and to bond together, sealing up the space between them and so preventing fluid or air from collecting there.

Why do I need pleurodesis?
The doctor has suggested pleurodesis as you have had a collection of fluid or air in your pleural space, and we believe it is likely to recur in the future if nothing is done to seal up the area where it has collected. Pleurodesis will prevent this from happening.

Do I have to have it done?
No, but your doctors believe this is the best way of stopping the problem in your chest coming back. It is your choice whether to go ahead with this treatment.

What does the treatment involve?
The pleurodesis will be done through the tube (chest drain) that has already been put into your chest to drain away the fluid or air that has collected in your pleural space.

Once the fluid has drained completely, the doctor will arrange a chest X-ray. The doctor will also do an ultrasound scan (a procedure that uses high-frequency sound waves to create an image...
of part of the inside of the body) to confirm that your lung has re-expanded as we would hope. Once we have done this, we will inject the pleurodesis drug (which is usually sterile TALC) into your chest through the chest drain. The drug is usually injected in a liquid form.

Sometimes pleurodesis can cause some pain. We will give you painkillers to help with this. It is still quite common to feel some discomfort during the procedure. If this happens, please let the nurse or doctor know so that we can give you more painkillers.

After we have injected the pleurodesis drug, we may close the drain for around one to two hours. We will then re-open the drain to allow drainage of any fluid or air that collects again. The drain may be left in for few more days. Sometimes, the doctor may advice to remove the drain straight away. When we remove the drain, the procedure is complete. A single stitch may be needed to close the site where the chest drain was inserted. If so it will be removed after seven days.

**How successful is pleurodesis?**

Pleurodesis stops the collection of fluid or air recurring in about 7 to 8 out of 10 cases. If it does come back, you may need to have your chest drained again. In some cases, we might attempt pleurodesis again. If a second pleurodesis is needed, the success rate is often lower.

**What are the expected benefits?**

When fluid collects in the pleural space it usually causes breathlessness. Pleurodesis aims to prevent the fluid from returning and therefore improve breathing.

**What are the risks or complications?**

Most patients undergo pleurodesis without any major problems. However, like all medical treatments, it does have some risks.

- Sometimes patients experience chest pain from pleurodesis. Painkillers are given as needed to help relieve this.
- Some patients experience fever for the first day or two after the procedure. This is usually controlled with paracetamol and is short-lived.
- All treatments that require a tube in the chest carry some risk of infection. This happens in about 2% of patients. If it does happen it usually settles with antibiotic treatment.

**What are the alternatives?**

For patients with collections of fluid the following options are available:

The fluid can be drained with a very small tube over short time. The major disadvantage is that the fluid is extremely likely to come back and further treatment will be needed. Repeated drainage with multiple tubes is best avoided.

The other option is a procedure called thoracoscopy, where the doctor will insert a camera into your pleural space and then insert the pleurodesis drug. After the procedure you will stay in hospital with the tube inserted for up to three days. If your lung fails to re-expand then pleurodesis will not work. This will happen in about 30% of all patients with pleural fluid. Please refer to information leaflet on Thoracoscopy for further information.
The third alternative is to insert a special tube called indwelling pleural catheter. This is a permanent tube that can be used to drain the fluid as it collects. Please ask for our leaflet Having an indwelling pleural catheter inserted for further information.

**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 pleurodesis, 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

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 t: 111

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

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