Oxford University Hospitals NHS Foundation Trust

Pleurodesis

Information for patients

Oxford Pleural Unit

Oxford Centre for Respiratory Medicine

Provisional appointment date and time:

Your doctors have recommended that you have a procedure called pleurodesis. This involves attaching your lung to your chest wall, to control fluid or air in the space around your lung. This information leaflet has been written to help you understand what this treatment involves, what it aims to achieve and your recovery afterwards.

What is pleurodesis?

Pleurodesis is a procedure which involves putting a mildly irritant drug into the space between your lung and chest wall (the pleural space), on one side of your chest. This is done to try to 'stick' your lung to the wall of your chest and prevent a further collection of fluid or air in this space. The drug will be put into your chest through the chest tube that you may already have.



If you are having a thoracoscopy procedure (where we use a small camera to look inside your chest), we will put the drug into your chest during the thoracoscopy.

Pleurodesis is usually carried out as an inpatient procedure, which means you will be admitted to hospital. It is usually carried out on the ward (with curtains or screens for privacy) or in a procedure room.

How does pleurodesis work?

The drug that is put into your pleural space will cause irritation to the outer lining of your lung and your chest wall. This causes these surfaces to become sticky and to bond together – sealing up the space between them and preventing fluid or air from collecting there.

Why do I need to have pleurodesis?

We have suggested this treatment to you as you have had a collection of fluid or air in your pleural space. The doctors think this is likely to happen again in the future, if nothing is done to seal up the area where the fluid or air had collected. The pleurodesis will hopefully prevent this happening again.

Do I have to have it?

No. It has been suggested to you as we believe this is the best way of stopping the problem in your chest from coming back, but it is your choice whether to go ahead with this treatment.

What does the treatment involve?

The pleurodesis will usually be carried out 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 your chest has drained completely, the pleurodesis drug will be put into your chest through this drain. There are a few different medicines that can be used in pleurodesis, and the doctors and nurses looking after you will talk to you about the specific one they use. A commonly used pleurodesis drug is sterile medical talc.

The drug is usually injected in liquid form, but if you are having a thoracoscopy procedure, the pleurodesis drug will be applied as a powder.

Pleurodesis can cause some pain, but we will give you painkillers before the procedure 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 the pleurodesis drug has been put into your chest, your chest drain may be closed off for about 1 hour, to hold the drug in place. The drain will then be re-opened to allow drainage of fluid or air to begin again.

The chest drain is usually left in position for at least 24 to 48 hours, but it may be left in longer if the drainage of fluid or air continues. You will need to stay in hospital for a minimum of 24 hours after the pleurodesis. Once the drain is removed, the procedure is complete. A single stitch is sometimes needed to close the site where the chest drain was inserted. If a stitch is needed, it should be removed after 7 days; this can usually be done by your GP's practice nurse.

How successful is pleurodesis?

We expect the pleurodesis to stop the collection of fluid or air from returning in about 7 out of 10 cases (70%). If it does come back, you may need to have further drainage and we may be able to attempt another treatment with pleurodesis. If a second pleurodesis treatment is needed, the success rate is often lower. If this happens your doctors will discuss this with you.

In some patients, pleurodesis is not possible as the lung does not fully expand (this is called trapped lung). If this is the case, your doctors will speak to you about this and alternative treatments.

What are the expected benefits?

When fluid or air collects in the pleural space, it usually causes breathlessness. Pleurodesis prevents fluid or air from accumulating, and so improves breathing.

What are the risks?

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

- Some people experience chest pain after pleurodesis treatment. We will give you painkillers before the procedure to reduce this. If you do experience any pain after the procedure, you can be given more painkillers.
- Some people experience a fever (high temperature) during the first day or two after the procedure. This is usually controlled with paracetamol and is short-lived.
- Sometimes pleurodesis can cause breathlessness due to inflammation in the lung itself. This usually settles down over a few days with oxygen treatment, although very rarely, (about 1 in 1,000 people) it can be serious or even fatal.
- All treatments that require a tube being inserted into the chest carry some risk of causing infection related to the tube itself. This happens in about 1 in 100 people. If this does happen, it usually settles with antibiotic treatment, although this may lead to a longer stay in hospital.

What are the alternatives?

If you have a large collection of fluid, the following options are available. Your doctors will discuss these with you:

- Fluid can be taken out of your chest using a needle. The amount we can remove in this way is limited to around 1 litre (many people have a collection of 3 to 4 litres) because complications such as pain or breathlessness are more likely if we rapidly take more fluid off in one procedure. The fluid is also highly likely to return again. This treatment has the advantage that you can go home and do not need to have a chest drain, but the major disadvantage is that the fluid is likely to come back and you will need further treatment.
- A small flexible tube (called an indwelling pleural catheter) can be placed in your chest, which you can go home with and learn how to drain at home. This can work well but does potentially mean that the drain will need to remain in your chest permanently, if the fluid continues to be produced. Sometimes, talc can be given through the catheter as an out patient, but this is not as successful at preventing fluid long term as having this done in hospital.
- Your doctors will advise you on these different treatment options. Making these decisions can be difficult and this website explains details of this and other possible treatments to help you make a decision – <u>https://mypleuraleffusionjourney.com</u>.

How to contact us

If you have any questions or concerns, please let us know.

If you are an inpatient, please speak to the doctors and nurses on your ward.

If you are an outpatient (not currently staying in hospital), please contact:

Pleural Specialist Nurse

Telephone: 07769 285 354 (Monday to Thursday)

Theatre Direct Admissions

(Level 1, John Radcliffe Hospital) Telephone: 01865 221 050 or 01865 221 055 (Monday to Friday, 8.00am to 3.00pm)

Outside these hours please call the hospital switchboard

Telephone: 01865 741 166 Ask for either the On-call Respiratory doctor or the Osler Respiratory Unit.

Notes

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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