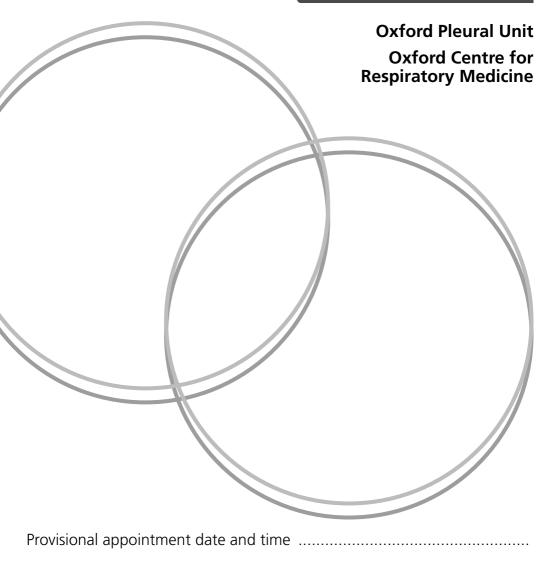
Oxford University Hospitals NHS Foundation Trust

## Local Anaesthetic Thoracoscopy

Information for patients

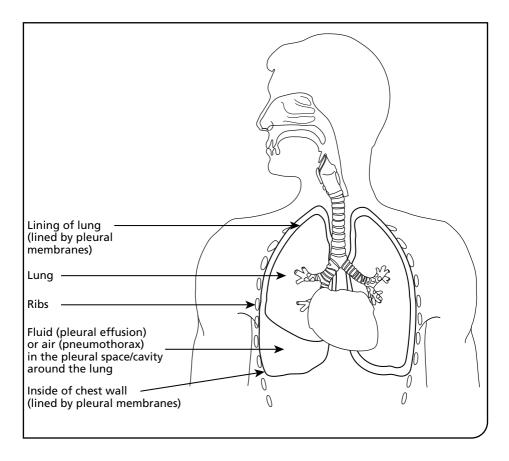


## Important information about your thoracoscopy

- Do not eat or drink anything for 6 hours before your procedure. You can take any medicines you need to have with a sip of water up until 2 hours before your procedure.
- Tell your doctor about all the medication you take and any medical conditions you have.
- Tell us if you are on any blood thinning or diabetes medications these are normally stopped before your procedure. It is important that you continue to take any other medications (including those for high blood pressure).
- Bring enough belongings for a three night stay in hospital please do not bring in any valuables.
- If your doctor tells you that you are likely to go home the same day, please arrange for someone to take you home from the thoracoscopy. You should also not be alone overnight after your thoracoscopy. For 24 hours after the thoracoscopy you cannot drive, return to work, operate machinery, drink alcohol, sign legal documents or be responsible for small children.
- After the procedure, contact your doctor if you are short of breath or having increasing chest pain.

## What is a thoracoscopy?

A thoracoscopy is an examination of the pleural cavity (the space between your lung and chest wall) with a special camera called a thoracoscope. This allows us to learn more about your illness and the cause of the fluid or air in your chest.



During the thoracoscopy, the doctor can also take small samples (called biopsies) from the pleural membranes on the inside of your chest and drain any fluid that has collected there. The samples are then looked at in a laboratory to help us find out the cause of your illness and the best way of treating it. Sometimes we are able to carry out a treatment using medical talc during the thoracoscopy, to stop the fluid or air from returning, or can insert an indwelling pleural catheter (semi-permanent drain) which can be drained at home when fluid reaccumulates.

The procedure is carried out using sedation medicine, which will make you feel sleepy, and local anaesthetic to make the area go numb.

## Why do I need a thoracoscopy?

Your doctor has recommended that you have a thoracoscopy because they feel this is the best way to find out more about your illness or to control your symptoms. This decision is made carefully, with your best interests in mind. It is your decision whether you wish to have the procedure.

# Is there an alternative test that I can have instead of the thoracoscopy?

There are alternative ways of getting biopsies from the chest. One of these uses a biopsy needle, which is inserted through a small cut in your chest wall. This alternative method is about half as effective at identifying the cause of fluid or air in the chest, and is about as painful as the thoracoscopy. The biopsy needle method has a further disadvantage, as it does not allow us to use medical talc to help control the build-up of fluid or air.

For these reasons, your doctor has recommended that you have a thoracoscopy. One cause of a pleural effusion is cancer and this website gives details of other procedures to investigate and treat this possibility – **https://mypleuraleffusionjourney.com**. We will discuss possible alternative procedures with you.

# How should I prepare for my thoracoscopy?

Please make sure we have your correct telephone number. We will contact you by telephone a few days before your procedure to confirm that you are still able to come. If we are unable to reach you, your appointment will be given to someone else who is waiting for this procedure.

At present, all patients are required to have a COVID-19 test prior to attending for your procedure. This is for the protection of you and other patients. We will provide information on how to arrange this test.

Please let us know if you may be pregnant, as this may affect the medications we use for the procedure.

#### **Fasting instructions**

Do not eat or drink anything for 6 hours before the procedure. You can have sips of water only up to 2 hours before the procedure, if you need to take any medicines. Please make sure that you follow these fasting (starving) instructions. Fasting is very important before a procedure under sedation. If you have anything in your stomach whilst you are under sedation, it might come back up while you are unconscious and get into your lungs. Your procedure will be cancelled if you do not follow these instructions.

On the day of your thoracoscopy, before your procedure, we will need details of all your medications (including any over the counter remedies), allergies and any medical conditions.

It is important to let us know in advance if you take blood thinning or diabetes medications, as we will need you to temporarily stop taking these before your procedure. You should take all your other medications as usual on the morning of the procedure – these should be taken with a sip of water at least two hours before you arrive.

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## If you take medication for high blood pressure, it is particularly important that you continue taking your tablets.

We also ask that you get your blood pressure checked at your GP practice two or three days before the procedure, to make sure that it is well controlled.

The following tables explain what to do with your medications. Please contact us if you are not sure what to do.

## **Diabetes medications**

Medication	Instructions
Diabetes tablets e.g. glibenclamide, gliclazide, glimepiride, glipizide, tolbutamide, metformin, pioglitazone and sitagliptin.	Do not take on the morning of the procedure.
Insulin injections	The dose of your insulin will usually need to be either reduced or stopped on the morning of your procedure. If in doubt, please don't take your insulin but bring it with you along, with all your other medicines.

## **Blood thinning medications**

Medication	Instructions
Warfarin	Usually stopped 5 full days before the procedure. You will need an 'INR' blood test 1-2 days before your procedure to make sure the 'INR' is below 1.5, otherwise we will need to cancel your procedure.
Aspirin	Do not take on the morning of the procedure.
Clopidogrel (Plavix) Dipyridamole (Persantin) Ticagrelor (Brilique)	Usually stopped 7 full days before the procedure.
Apixaban (Eliquis) Dabigatran (Pradaxa) Rivaroxaban (Xarelto)	Usually stopped 2 full days before the procedure.
Dalteparin (Fragmin)	Full ("treatment") dose injections are usually stopped 1 full day before the procedure. Low ("prophylactic") dose injections, often given to inpatients, are usually continued as normal

## All other medications

Medication	Instructions
All other medications (including those for high blood pressure)	Please take as normal, at least two hours prior to the procedure, with a sip of water.

Please bring enough belongings for a three night stay in hospital. Please bring all of your medications with you when you come for the procedure. You should also bring any glasses that you need for reading. Please do not wear jewellery or nail varnish or bring in any valuables.

## What will happen on the day?

Please come to the reception desk in Theatre Direct Admissions, on Level 1 at the John Radcliffe Hospital, at the time you have been given.

When you arrive, a nurse will greet you and take your blood pressure, heart rate and temperature. They will also ask you questions about your medical history, medications and any allergies you might have.

The nurse or doctor will insert a cannula (tiny plastic tube) into your hand or arm. This will be used to give you the sedation medication into your vein, to make you sleepy during the procedure.

The procedure will be explained to you again and you will have the opportunity to ask any questions you might have. You will be asked to sign a consent form to confirm you are happy with the procedure to go ahead. The nurses will then ask you to change into a hospital gown.

Before the thoracoscopy, you will be given an injection of antibiotic into the cannula, to reduce the risk of any infection.

When your thoracoscopy is due to start, you will be shown into the thoracoscopy room and will be asked to lie on a couch. Your blood pressure, oxygen levels and heart rate will be monitored using a cuff on your arm, a sensor on your finger and some stickers attached to your chest. You will be given some oxygen into your nose or mouth, to keep the oxygen in your blood at a safe level. When you are comfortable, you will be given the sedation medication into the cannula. This will quickly start to make you feel sleepy.

The doctor will then do an ultrasound scan of your chest, to find where best to insert the thoracoscope. This involves putting some gel onto your chest and using a hand-held device to roll over your skin. The ultrasound creates images on a screen. It is not painful. The doctor will then inject local anaesthetic into the skin over your chest wall. This will sting a little at first, but will soon numb the area so you do not feel anything during the examination. Once the area is numb, the doctor will make one, or sometimes two, small 1cm cuts in the side of your chest, about 10-20cm below your armpit. The thoracoscope is then passed through these cuts, allowing us to see inside your chest. Some specimens will be taken and any fluid inside your chest will be drained away. If you feel any discomfort in your chest when the specimens are taken we will give you further painkilling medication into your cannula.

During the procedure you may be able to hear what is happening around you; this is normal. We may insert sterile medical talc into your chest cavity, which helps to prevent the fluid or air from returning. We may also insert a semi-permanent drain, called an indwelling pleural catheter, through which fluid can be drained at home as required. The doctors will discuss whether this is likely to be needed before the procedure.

At the end of the procedure a tube will be inserted through the cut, to allow any fluid or air to continue to drain from your chest. This tube is secured using a stitch and a sticky dressing. The tube will be attached to a bottle, which will be placed on the floor. If you have a second small cut, this will also be closed using a stitch and covered with a dressing.

The thoracoscopy usually lasts between 60 and 90 minutes.

## Can anything go wrong?

Thoracoscopy is generally a very safe procedure, with serious complications being rare. Any medical procedure carries a very small risk to life, but for thoracoscopy this is very low indeed (less than 1 in 1,000 chance).

#### Pain

- You are likely to experience some pain, but this is rarely severe. The local anaesthetic will sting briefly and the chest tube which is put in at the end of the procedure can be mildly painful. We will give you painkillers to relieve this.
- If you need to have sterile medical talc put into your chest, this may cause some chest pain over the twenty-four hours after the procedure. If this happens it can also be treated with painkillers.
- After you have been discharged from hospital, your chest is likely to be sore for a week or so. We will give you painkillers to help control this. You may experience occasional sharp 'scar pains', which can affect your chest for some months afterwards. These are usually very brief and not severe. They do not mean that anything has gone wrong with the procedure.

#### Infection

• About 1 person in every 100 who has a thoracoscopy suffers an infection at the site of the chest drain. If this occurs it can usually be treated with antibiotics, but it may mean you need a longer stay in hospital. Very rarely, such infections can be serious and will need to be treated with an operation.

#### Bleeding

• About 1 or 2 people in 1,000 may develop significant bleeding. This is usually effectively treated at the time of the procedure, but might (very, very rarely) need to be treated with an operation.

## Will it be unpleasant?

The sedative used during the procedure usually means you have no unpleasant memory about what happened. As well as using sedatives, the local anaesthetic which is injected into your chest wall where the small cut will be made means that you should not feel the thoracoscope being inserted. We can also give you painkillers to control any pain or discomfort.

# What happens after the thoracoscopy?

After the thoracoscopy you will be sleepy and will be monitored by a nurse in our Recovery Area. You will also have a chest X-ray.

The chest drain will continue to drain any remaining air and/ or fluid from your chest cavity. This drainage will usually be continued for between a few hours up to 3 or 4 days, depending on your particular circumstances. Your doctors and nurses will be able to estimate how long this will be for you. You may be able to go home on the same day as the procedure, depending on what you have had done during the thoracoscopy.

You may feel some discomfort from the chest drain, but your nurse will give you painkillers to help with this. If your chest becomes increasingly painful or if you feel any increased shortness of breath, please tell your nurse immediately.

If needed, we may attach your drainage bottle to some gentle suction to help the drainage. You may feel a little bit more discomfort from this but you can have more painkillers if you need them.

Your nurse will regularly record your temperature, pulse, blood pressure and breathing. They will also check your oxygen levels, the site of your examination and how well your chest drain is working.

Unless you are going home the same day, you will be transferred to a ward. We will do a chest X-ray the day after the thoracoscopy. This is to check that all the fluid and air that may have collected in your chest during the procedure has drained away. It also helps us to assess the success of the procedure. If you need to stay in hospital after the procedure, we will give you regular injections to help prevent blood clots forming while the chest drain is in position.

If you go home the same day, the nurse will remove the chest drain, and you will need to be collected from Theatre Direct Admissions (Level 1, John Radcliffe Hospital) by a friend or relative. On the day, we will call them to update them on whether you are going home and agree a suitable collection time. Before you leave, the nurse will remove the cannula from your hand/arm.

Because the sedation can affect your judgement and behaviour slightly (even if you think you are feeling fine), you should not drive, work, operate machinery, drink alcohol, sign any legal documents or be responsible for small children for 24 hours after the procedure.

You will not be able to drive for 24 hours after the thoracoscopy (this is a legal requirement after sedation). It is therefore essential that someone accompanies you home, either driving you home or travelling with you in a taxi. You should not go home on public transport after this procedure. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home. You should also not be alone overnight after your thoracoscopy, in case you feel unwell.

## Looking after your chest drain

Your doctors and nurses will look after your chest drain whilst you are in hospital. However, there are a few simple rules that you can follow to minimise any problems, particularly the risk of the tube being pulled out:

- If you need to move around, always keep the drainage bottle below your waist. This help to prevent fluid from going the wrong way and entering your chest.
- If your chest drain is attached to suction, you will need to stay close to your bed (as the suction tube will limit your movement).
- Keep the drainage bottle on the floor when you are not moving around.
- Do not swing the bottle by the tube.
- Take care not to knock the bottle over (make your visitors aware of where it is).
- If you feel the tube may have moved or may be coming out, please tell your nurse.

### When is the drain taken out?

Your doctors will discuss with you how long the drain needs to stay in. This can be anywhere from the same day to about five days, depending on how well you are responding to treatment. You may need to have several chest X-rays during this time, to see when all remaining fluid and air in your pleural space has been drained.

Removing the drain is straightforward and will be done by your nurse. Once all the dressings are removed, the nurse will encourage you to take a couple of deep breaths. They will then ask you to hold your breath and, while you are doing this, will gently pull the tube out. This can feel painful but only lasts a few seconds. There will already be a stitch in the cut, which was holding the drain in place. The nurse will pull this tight to close the wound and will put a dry dressing over the wound. You may have a chest X-ray to make sure your lung remains fully inflated.

After you are discharged from hospital you should try to keep your stitch dry for five days. The stitch will need to be removed by your GP's nurse after seven days.

## **Getting the results**

The results of your thoracoscopy will not be available immediately. It takes several days for the specimens to be analysed. You will be given an appointment in the Chest Clinic to discuss the results with your doctor about 2 weeks after the procedure. Please contact your Chest doctor's secretary 1 week after the procedure if you have not received an appointment for the Chest Clinic.

### How to contact us

If you have any questions or concerns, please contact:

#### **Pleural Specialist Nurse**

Tel: **07769 285 354** (Monday to Thursday)

Theatre Direct Admissions (Level 1, John Radcliffe Hospital)

#### Tel: 01865 221 050 or 01865 221 055

(Monday to Friday, 8.00am to 3.00pm)

Outside these hours please call the Hospital switchboard:

#### Tel: 01865 741 166

Ask for either the On-Call Respiratory doctor or the Chest Ward.

If you are not staying in hospital as an inpatient, when you are ready to be discharged you can be collected from **Theatre Direct Admissions**.

### **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.

Author: Dr John Wrightson, Consultant in Respiratory Medicine October 2022 Review: October 2025 Oxford University Hospitals NHS Foundation Trust www.ouh.nhs.uk/information



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