

Local Anaesthetic Thoracoscopy

Information for patients

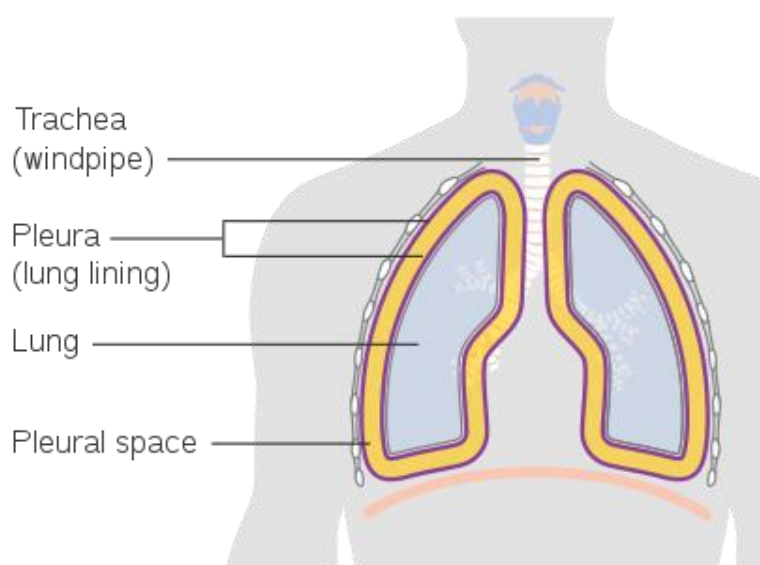


If you have been sent this leaflet before your admission, please read and bring it with you to hospital

- You should read this leaflet carefully before you consent/agree to thoracoscopy
- You can change your mind about having the procedure at **any time**
- Please ask about anything you do not fully understand or wish to have explained in more detail
- In this leaflet, we explain some of the aims, benefits, risks and alternatives to this procedure. We want you to be fully informed about the procedure and your choices so that you can be involved in making decisions.

What is a thoracoscopy?

It is an examination of the pleural cavity with a camera called a thoracoscope. The pleural cavity is the space inside your chest between your chest wall and your lung (see below). The doctor will be performing this procedure because they need to consider why there is fluid or air accumulating in the space and to see what the lining of the lungs and chest wall look like. This procedure is performed under local anaesthesia and sedation. Sometimes we can carry out a treatment using medical talc during the thoracoscopy to help stick the lung up against the chest wall to prevent fluid or air re-accumulating.



Why are samples taken?

The doctor can take small samples (biopsies) of the lining of the chest wall (pleura) and drain any fluid that has accumulated. These samples are then sent to the laboratory for analysis to help find the cause of your problem and the best way of treating it.

Is there an alternative test I can have instead?

There are other ways of getting a biopsy such as using a biopsy needle through a cut in the chest wall. This is not as effective in finding the cause of the problem and it also does not allow any treatment, if appropriate, to be done at the same time.

After careful consideration and with your best interests in mind, your doctor has recommended that you have a thoracoscopy. It is your decision whether you wish to proceed and we would be happy to discuss alternatives with you if you wish.

Will I be awake and will thoracoscopy be painful?

Patients are offered a sedative during the procedure. Whilst most patients do not remember the procedure, some patients remember some or all of it. The procedure is **not** performed under a general anaesthetic. Local anaesthetic will be injected into the chest wall to numb it so you should not feel the thoracoscope being inserted. After the procedure, when the local anaesthetic begins to wear off you may experience discomfort but you will be offered painkillers to relieve this.

How should I prepare for my thoracoscopy?

Before the procedure

- Please bring any belongings with you that you may need for a short stay in hospital
- Please bring a list of your medications including any inhalers and insulin with you to hospital
- Please let us know if you suffer from any long-term illness (especially diabetes, any breathing difficulties or heart problems), if you are pregnant, or if you have had any serious adverse (bad) reactions to any medications in the past
- We will test your blood to check you are not anaemic, your liver and kidneys are working normally, and your blood type.
- We will perform an ultrasound (jelly) scan of your chest to locate where the fluid and any abnormality on the lung lining is. This will be repeated at the time of the procedure.

Fasting instructions

- Please do not eat or drink anything for six hours before your procedure.
- All your usual medications should be taken as normal with a sip of water at least 2 hours before your procedure. There are some exceptions to this – unless specifically told otherwise by your Consultant please follow the below instructions:

Diabetes medication

Medication	Instructions
Diabetes tablets e.g. gliclazide, glimepiride, glibenclamide, 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 reduced or stopped on the morning of your procedure. If in doubt, don't take your insulin but bring it with you

Blood thinning medication

Medication	Instructions
Warfarin	Stop 5 full days before your procedure. You will need your 'INR' blood test checked and it needs to be 1.5 or below for your procedure to go ahead
Aspirin	Do not take on the morning of your procedure
Clopidogrel (Plavix) Dipyridamole (Persantin) Ticagrelor (Brilique)	Stop 7 full days before your procedure
Apixaban (Eliquis) Dabigatran (Pradaxa) Rivaroxaban (Xarelto)	Stop 2 full days before your procedure
Dalteparin (Fragmin) injections	Stop 1 full day before your procedure

All other medications

Medication	Instructions
All other medications, including those for high blood pressure	Please take as normal, at least 2 hours before the procedure with a sip of water
Inhalers	Take all as usual

During the procedure

In the procedure room, you will be made comfortable on a hospital trolley bed in a lying position. Your oxygen levels, blood pressure and heart rate will be monitored throughout the procedure. You will be given some oxygen through your nose or mouth to keep oxygen at a safe level in your blood.

The doctor will give you an injection of a sedative into a vein through a small plastic tube (cannula) in your arm to make you feel sleepy and relaxed. You will be awake throughout, but may remember very little about it.

Your skin will be cleaned and sterile drapes will be put over you to keep the working area as clean as possible. The doctor will perform an ultrasound scan of your chest. This will create some images on a screen for us and does not hurt at all.

The doctors will inject some local anaesthetic under the skin and then deeper to the chest wall-lining. This will sting at first but will then go numb so you don't feel anything during the procedure.

The doctor will make a small cut in your chest and insert the thoracoscope through the cut so we can look inside. Some samples will be taken and any fluid will be drained. We may insert some medical talc powder into the chest cavity to prevent fluid or air returning. Your doctor 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 and stitched into place on your chest wall. The tube will be attached to a bottle which will sit on the floor. This will allow any further air or fluid to drain.

The procedure can last up to 60 minutes.

Can anything go wrong?

Local anaesthetic thoracoscopy is generally a very safe procedure with serious complications being rare. All medical procedures carry a small risk to life but for thoracoscopy this is very low indeed (less than 4 in 1,000).

There are other risks that you should be aware of:

- **Pain** - you are likely to experience some pain but this is rarely severe. The local anaesthetic can sting a little and your chest tube can be mildly painful. You will be offered painkillers to help this. If you have medical talc administered, then your chest can be sore for up to 24 hours afterwards. Your chest can remain sore for about a week after discharge but for a few patients they can experience sharp 'scar pains' for a few months afterwards. These are usually brief and not severe and do **not** indicate that anything has gone wrong with the procedure.
- **Infection** - Less than 1 in 100 patients suffer a severe infection inside the chest. If this happens you will receive antibiotics and may need to stay longer in hospital. Very rarely such infections can be serious and need to be treated with an operation.
- **Bleeding** - Less than 1 in 100 patients may develop significant bleeding. This is usually treated at the time of the procedure but very, very rarely may need an operation to treat it.
- **Persisting air leak** – approximately 3 in 100 patients may have a persisting air leak following the procedure which requires the chest drain to be left in place for a longer period of time.
- **Minor complications** - minor bleeding, air under the skin, temporary low blood pressure during the procedure, and infection around the operation site. These can occur in up to 1 in 14 patients and are all treatable.

What happens after the procedure?

You will be sleepy and will be monitored by a nurse who will regularly check your temperature, oxygen levels, blood pressure and heart rate. You will also have a chest x-ray.

After 2 hours, you may be allowed to eat and drink something. It is not safe to eat or drink until the sedation has worn off in case you choke on your food or drink. Some patients may go home on the same day- if this is the case then your chest tube will be removed before you leave. You are not allowed to drive for 24 hours after having sedation so will need someone to collect you and stay with you overnight.

If you are required to stay in hospital, then you will be transferred to the ward. In some cases, gentle suction will need to be applied to your drainage bottle to help your lung re-inflate. This may cause some mild discomfort and you will be offered painkillers if you need them.

Looking after your chest drain

Your doctors and nurses will look after your chest drain whilst you are in hospital but there are a few simple rules you should know to minimize any problems (especially the risk of the tube coming out):

- Never swing your drain bottle by the tube
- Take care not to knock over your drain bottle and always keep it on the floor when you are not moving around (tell visitors what and where it is).
- When you are moving around always keep the chest drain bottle below your waist level to prevent fluid 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 (your movement will be limited by the suction tube).
- Sometimes a portable suction drainage device will be suitable.

Please tell a nurse immediately if you feel your tube may have moved or may be coming out, or you develop chest pain or worsening breathlessness.

Removal of your chest drain

Your doctor will decide when to remove your chest drain. This is a simple procedure and often painless. You may be asked to take some deep breaths or hold your breath whilst the tube is removed. The cut in your skin may be stitched and a dry dressing will be placed on top. You should try and keep this dressing dry and arrange to have the stitch removed in 5-7 days at your GP surgery. You may have a chest x-ray afterwards.

When can I resume normal activities (including work)?

As you will have been given a sedative you might continue to feel sleepy for the rest of the day. Therefore, it is important that an adult, such as a relative or friend, stays with you for 24 hours after the procedure and it is important that you do not do any of the following within this time:

- Drive
- Ride a bicycle
- Operate machinery including house hold appliances
- Perform tasks requiring skill or judgement (including signing official documents, making important emotional or financial decisions)
- Return to work
- Drink alcohol.

Check-ups and results

After the thoracoscopy has been carried out the doctor may be able to tell you what they have seen. However, the full results of the test will not be available until your follow-up outpatient appointment (or sometimes during your hospital stay if you are an inpatient), as it can take a couple of weeks to process the results of any biopsies or fluid. You will be given a follow-up appointment before you go home unless one is already pre-arranged.

Information and support

If you have any queries about thoracoscopy or find that you cannot keep this appointment, please contact your consultant's secretary between the hours of 9am and 5pm.

If you need any additional information or have concerns regarding your procedure, please contact the Respiratory Department at the appropriate hospital:

Royal Infirmary Edinburgh: 0131 242 1867

Western General Hospital: 0131 537 2348

Interpretation and translation

Your GP will inform us of any interpreting requirements you have before you come to hospital and we will provide an appropriate interpreter. If you are having this procedure as an existing in patient, staff will arrange interpreting support for you in advance of this procedure. This leaflet may be made available in a larger print, Braille or your community language.

