

Thoracoscopy

Your doctor has advised that you have a thoracoscopy. The reason why a thoracoscopy is advised is usually for one or more of the following.

- To find the cause of your chest symptoms
- To remove any fluid that has collected around your lung
- To give treatment to help prevent your symptoms happening again.

An appointment has been made for you to attend the respiratory unit on level 9 at Doncaster Royal Infirmary.

Day: Date:

Time to arrive on the ward:

Fast from:

Approximate time of the thoracoscopy:

A doctor will speak to you prior to the procedure; you will have time to ask any questions you have. You will need to sign a consent form in their presence. Please inform the doctor or nurse if you are taking any of the following medications:

Warfarin, Apixaban, Rivaroxaban, Endoxaban, Fondaparinux Sodium, Clopidogrel, Dipyridamole, Dalteparin or Aspirin. These are blood thinning medicines and these would have needed to be stopped before the procedure.

What is a thoracoscopy?

A thoracoscopy involves passing a rigid scope called a thorascope through a small cut about 1-2cm in the chest wall and into the space around your lung called the pleural space. Any fluid is drained off through the same cut. A suction tube is used to drain the fluid off.

Tissue samples are usually taken from the pleura using an instrument attached to the scope. Once the tissue samples are taken, sterile talc is often then sprayed into the pleural space to help reduce the chance of any further build-up of fluid.

Before the thoracoscopy

You should not eat or drink anything for at least 4 hours before the thoracoscopy. You should take your usual medicines with a small amount of water. People who have diabetes will be advised by the medical staff on the ward. You may have had a blood test before the day of the procedure or we may need to take a blood sample on the day.



A small plastic tube called a cannula will be inserted into a vein in your hand or arm. We can give you pain relieving medication through the cannula if necessary. We will also offer you some oral medication before the procedure to help relax you.

The thoracoscopy itself

The thoracoscopy usually takes between 40-60 minutes. You will be asked to lie on your side, and you will need to lay fairly flat. We will try to make you as comfortable as possible as you will need to stay in this position throughout the procedure.

Before we start the nurse will place a small probe on your finger to monitor your oxygen levels. Also a cuff will be placed around the top of your arm to monitor your blood pressure. During the procedure we will closely monitor your observations. You may need to be given some oxygen during the procedure. To give you oxygen we will place a plastic tube with small plastic prongs under your nose, the prongs will just fit into your nostrils. The oxygen will flow through the nasal prongs. If you do need oxygen it would generally be for a short time only.

A sound wave test is done to identify a safe place to make the cut on your chest. The chest wall is then numbed with local anaesthetic. You may feel the doctor pushing on your chest but this should not be painful and will not last long. If you need pain relief the nurse will give you some through the small tube in your hand.

Once the fluid is drained the doctor will insert the scope and may take some small samples of tissue from the pleura for analysis. This can be painful for some patients; you will be given pain relief before we start to take the samples. Once the tissue samples are taken the doctor may spray the sterile talc around the pleura. A chest drain will then be put in through the same cut to drain any remaining fluid and the air that has been allowed into the chest during the procedure. The drain will be connected to a special bottle to collect any remaining fluid. The doctor will use stitches to secure the drain and close the cut.

A dressing will be placed to help attach the drain and keep the site clean. If the appearance suggests that the lung will not re-expand, this is called a trapped lung, an indwelling pleural catheter (IPC) may be considered for you.

The IPC is a special type of drain that is tunnelled under the skin and can remain in place for as long as is necessary. The drain is intermittently connected to a suction bottle to allow fluid and air to be removed. The district nurse in your area will have had training to do this and they will visit you at home generally once or twice a week initially.

After the thoracoscopy

You will be taken back to your bed on the respiratory unit. You may have a drink and something to eat if you are not too sleepy. You will need a chest x-ray following the procedure this will be arranged by the doctor on the ward.

The ward staff will continue to monitor your observations every 15 minutes for the first hour and if stable then every 4 hours. You may see some bubbles of air and a little blood draining into your chest drain bottle which is normal. Most commonly patients are allowed home the following day of the procedure once the drain has been removed.

Pain

You may feel some pain or discomfort in your chest. If this happens you must inform the nursing staff or doctor so that they can give you pain relieving medication.

Chest drains

The chest drain is to help drain any fluid or air that remains in your chest after the procedure. You can walk around the ward if you are able, but the chest drain bottle should always be held below your waist. The drain will usually be removed within 24 hours. Once it is removed you should be able to go home. Rarely some patients may need to stay for an extra couple of days for example if there is still a lot of fluid draining or the lung hasn't re-expanded.

When the drain is removed a stitch will be left in place to close the small hole where the drain has been. The stitch will need removing after 7-10 days. If you are able to you should make an appointment with your practice nurse at your GP. If you are unable to get out of your home then we can refer you to the district nurses to remove the stitch at your home. We will send you home with some dressings as the dressing can come off. You should keep the site clean and dry. If you are concerned about the site contact the ward for advice.

When will I get the results?

The results usually take about a week to be finalised. One of the lung nurses may contact you by phone and arrange for you to attend to discuss the results.

What are the possible problems with having a thoracoscopy?

The problems that may occur after the thoracoscopy are not usually serious. This test is recognised as the safest and most sensitive way of getting the diagnosis and dealing with the pleural fluid. Once the fluid has been removed, the aim is for the collapsed lung to re-expand back to normal.

- In some cases however the lung may be trapped and not fully re-expanded. Alternative treatments do exist to deal with recurrence of fluid around the lung if this happens.
- Some patients may occasionally experience chest discomfort and increased breathlessness when the talc is sprayed, but these sensations usually settle quickly. Short-lived pain may also occur when the tissue samples are being obtained.

- Fluid around the lung can become infected and removing it reduces this risk however the procedure itself does carry a small risk of infection despite full sterile precautions.
- There is a small risk of the scope penetrating the lung, or the pleural tissue tearing causing a persistent leak. If this happens then the drain would need to stay in place longer. The air leak can sometimes enter the tissues of the chest wall and occasionally neck and face, which is unpleasant and will require further in patient treatment.
- There is a theoretical possibility of the scope damaging one of the adjacent organs but this is much reduced by using the sound wave test to find a safe place to make the cut. If the heart, liver or spleen were damaged this could be life threatening. However bleeding usually stops using simple measures such as applying local pressure but if not a surgical procedure may be considered.
- When the chest drain has been removed the small wound it leaves can become sore or infected. Signs of infection can include redness, swelling, feeling hot to touch and fluid leaking from the site. If you have any of these symptoms please contact the ward.
- You will be able to shower but you should aim to keep the wound clean and dry. You will be provided with spare dressings on discharge.

What to do if there are problems following discharge

If there are problems with your breathing or with the wound after you have gone home please contact the respiratory unit at Doncaster Royal Infirmary on telephone number 01302 644067.

Alternatively you can contact the respiratory nurse's office on telephone number 01302 644657 (Monday-Friday 8am-6pm). If there is no one to take your call please leave a message and we will return your call.

Patient Advice & Liaison Service (PALS)

The team are available to help with any concerns, complaints or questions you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059

Email: dbth.pals.dbh@nhs.net