

## Having a Thoracoscopy

### What is a thoracoscopy?

Thoracoscopy (also known as pleuroscopy) is a medical procedure involving internal examination within the pleural and thoracic cavity.

Thoracoscopy uses a special instrument called a thoracoscope. This is a thin, tubular instrument which has a video camera built into the end. The camera feeds pictures from the chest on to a viewing screen. This allows your doctor to look inside the chest and view the lung surface.



Thoracoscopy can be used for a range of things, including:

- Taking small samples of tissue (biopsies) from the pleura (the lining of the lungs). These samples can then be examined in the laboratory.
- Fixing holes in the surface of the lungs
- Removing fluid that has accumulated in the chest, which is stopping the lungs inflating properly. This is known as a pleural effusion.
- Preventing further pleural effusions by applying a thin coat of talc to the surface of the lung. This is known as pleurodesis.

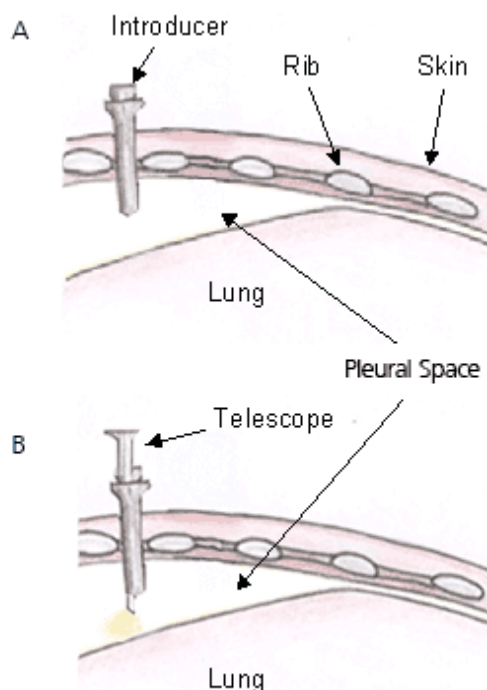
### How does Thoracoscopy work?

The doctor makes a small incision in the chest wall between the ribs. The hole is known as a port, and is usually about a ½ inch (1½ cm) long. The doctor then inserts the thoracoscope through the hole. Any fluid that has collected around the lung is removed, so that the inside surface of ribcage and the surface of the lung can be seen clearly. Special surgical instruments can be inserted through the thoracoscope to take biopsy samples or apply talc for pleurodesis.

Some operators will also use a second port to insert instruments, though your doctor will tell you beforehand whether he/she will be using single or double incisions for the procedure.

Once the procedure has finished, the instruments are removed and the incision is closed, usually with 1-2 stitches. A tube is left in place to allow drainage of any remaining fluid and air in the chest after the procedure.

### What happens during Thoracoscopy?



Before the procedure, a small tube (cannula) will be inserted into a vein in your arm or hand to give you intravenous medication. You will also have an intravenous infusion (a “drip”) running throughout the procedure. You will be given an injection of a pain killer in your buttock. Usually you are given oxygen through a mask or nasally.

You will be placed on the endoscopy trolley lying on your side. Your doctor will make the incision in your chest and insert the thoracoscope and any other instruments that are needed. After the doctor has finished the procedure, a tube will be left in your chest, these are known as 'chest drains' and allow any fluid or air that collects to escape. Any samples of tissue taken from your chest or lungs will be sent to the laboratory for further testing.

If talc pleurodesis is performed, the drainage tube may sometimes be left in place for up to two days afterwards and will be attached to a suction unit. You should not generally feel the suction but the attachments do restrict your movement to a few feet from the bed.

### Are there any possible side-effects or complications?

Although thoracoscopy is a 'keyhole' procedure, the instruments have to pass between the ribs and complications can happen. Some of these can be serious and even cause death (risk is less than 1 in 1,000). The possible risks are:

- **Pain** – the local anaesthetic and painkilling injection should help to make you feel comfortable. If you have any pain during the procedure, let your doctor know. If you have pain when you are at home, use painkillers such as paracetamol.
- **Breathlessness** settles quickly after the procedure. Sometimes breathing can be more difficult due to the effects of sedation. Your oxygen levels will be monitored and you will be given extra oxygen if necessary.
- **Bleeding** can occur from the port(s) or biopsy site, but the bleeding usually stops on its own. Make sure that your doctor knows if you are on any **blood thinning drugs** such as warfarin or clopidogrel.
- **Infection** can occur in the pleural space. The treatment may involve draining any infected fluid, which would involve a stay in hospital.
- **Allergic reaction** to the drugs, equipment or materials used in the procedure. Ensure you tell your doctor if you have had allergic reactions to drugs, tests or equipment in the past.
- **Surgical emphysema** occurs when air leaks into the tissues under the skin. This is not serious and usually settles within a few days.
- **Pulmonary oedema** occurs when the lung gets soggy with fluid causing breathlessness. This can happen if your lung needed to be inflated again or if you had a pleurodesis. You will need to stay in hospital for further treatment.
- **Pneumothorax** happens when air escapes into the space around the lung. Usually a pneumothorax is small and does not cause any problems, but if a lot of air escapes you will need to stay in hospital for a day or two. You will have a tube in your chest to reduce this risk. If you suddenly become short of breath or have severe chest pain you must let your doctor know immediately.
- **Numbness** can occur in the area of the incision. This is usually temporary.

### Will the procedure be painful?

The procedure is performed under a local anaesthetic, with an injection of a painkiller beforehand and sometimes, if the patient wishes, a conscious sedative can be given.

Conscious sedation is an injection to make you feel relaxed and sleepy. If you decide to have sedation it is not like having a general anaesthetic as you will still be able to hear and understand what is being said to you.

- If you want to have the conscious sedation for this test please arrange for someone to collect you as you will not be able to drive yourself home. **Someone needs to be with you for 12 hours after the test.**

## How long does the procedure take and how long will I be in Hospital?

Thoracoscopy is performed in the Endoscopy Department; a thoracoscopy takes approximately 1½ hours. The time varies depending on the findings and if treatment is required.

You will generally stay in hospital overnight and you will move from the Endoscopy Department to the respiratory ward afterwards for full recovery. However, some people may be able to go home later the same day.

## How do I prepare for the test?

Your doctor should discuss any specific preparations with you in the outpatient clinic.

- You should have no more than a light breakfast early on the morning of the procedure, but you do not need starve beforehand.
- If you want conscious sedation it is important that you **do not have anything to eat** for at least **six hours** before your appointment time and **only drink water** until **two hours** before your appointment time.
- Most regular medications that you would normally take in the morning should be taken as usual.
- You should take your usual inhalers as normal in the morning. Please bring them with you.
- If you are diabetic, your consultant will discuss your diabetic management with you prior to your procedure. If you have any concerns please contact our diabetic link nurse in the Endoscopy Unit:
  - Conquest Hospital Endoscopy Unit – Tel: 0300 131 5297
  - Eastbourne DGH Endoscopy Unit – Tel: 0300 131 4595
  - Opening hours: Monday to Friday - 8.00am to 6.00pm
- If you take any blood thinning medication such as warfarin or clopidogrel please contact the Endoscopy Unit for further advice as you may have to stop these drugs.

## What do I need to bring with me?

Please bring the following with you:

- A list of all your medications and any allergies you may have.
- The name and telephone number of the person who will be taking you home following the procedure.
- Reading glasses
- Dressing gown and slippers for your use if you wish.

Do not bring any valuables with you, as the trust cannot take responsibility for any losses.

## What can I expect after the thoracoscopy?

The site of the incision may be sore it usually settles after a few hours. If the pain persists pain killers can be taken.

You will have a chest x-ray following the procedure, and another after the chest drain has been removed. The x-rays will be reviewed before you can go home.

## Do I need somebody to take me home?

If you are treated as a day case you will need a responsible adult to collect you from the Endoscopy Unit and stay with you for at least 12 hours after your test. We advise you to rest for the remainder of the day.

## When can I return to work?

You should be able to resume normal activities 24 hours after the thoracoscopy.

## When will I know the results?

Biopsy results generally take five days to be processed. Occasionally, additional analysis may be needed on the samples using special techniques (immunocytochemical staining). This can require an additional week.

An outpatient visit will usually be arranged to discuss the results of any biopsies

As previously mentioned, you will have a few stitches in place, which should be kept dry until they are removed five - seven days later by either your practice nurse or the respiratory clinic nurse. You will be advised of the arrangements.

## Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 or by email at: [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net)

## Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

**If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.**

**Tel: 0300 131 4500 Email: [esh-tr.AccessibleInformation@nhs.net](mailto:esh-tr.AccessibleInformation@nhs.net)**

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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## Reference

The following clinicians have been consulted and agreed this patient information:

**Consultant Respiratory Physicians:** Dr J. Wilkinson & Dr N. Sharma

**Endoscopy Nurses:** Sister M. Tallud and Sister T. Ward

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Responsible clinician/author: Sister T Ward

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