# 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 that 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.



## Why would I need this procedure?

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

- Taking small samples of tissue (biopsies) from the pleura (the lining of the lungs). These samples can then be examined in the laboratory.
- Removing fluid that has accumulated in the chest, which stops 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.

# 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. You may be given oxygen through a mask or nasally. You will lie on your side on an endoscopy trolley.

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  $\frac{1}{2}$  inch ( $1\frac{1}{2}$  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.

Thoracoscopy takes approximately 1½ hours, time varies depending on the findings and if treatment is required. Once the procedure has finished, the instruments are removed and the incision is closed, usually with 1-2 stitches. 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 are 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.

## What are the potential risks and side effects?

Although thoracoscopy is a 'keyhole' procedure, the instruments must 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 because of sedation. Your oxygen levels will be monitored, 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 could 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.

# What should I do before I come into hospital?

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 to 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 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.
  - Conquest Hospital Endoscopy Unit Tel: 0300 131 5297
  - Eastbourne DGH Endoscopy Unit Tel: 0300 131 4595
  - Opening hours: Monday to Friday 08.00 hours to 18:00 hours (except bank holidays)
  - Email both departments at <u>esht.endoscopypreassessment@nhs.net</u>
  - Respiratory Secretaries Conquest Monday to Friday 8.30am to 4.30pm Tel: 0300 131 4500 ext. 734835 / 734836 / 734837 (except bank holidays)
  - Respiratory Secretaries EDGH Monday to Friday 8.30am to 4.30pm Tel: 0300 131 4814 / 0300 131 4815 / 0300 131 4816 (except bank holidays)

### Will I have an anaesthetic?

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 unlike a general anaesthetic, you will still be able to hear and understand what is being said.

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 procedure.

### How will I feel afterwards?

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.

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.

### How long will I be in hospital?

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.

### 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.

#### How soon will I be able to resume normal activities?

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

## Will I have to come back to hospital?

Biopsy results generally take five days to be processed. Occasionally, an additional week may be needed for analysis on the samples using special techniques (immunocytochemical staining). 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 on 0300 131 4784 or <u>esh-</u> <u>tr.patientexperience@nhs.net</u>.

## Hand hygiene

We are 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 our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or <u>esh-tr.AccessibleInformation@nhs.net</u>

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

### Reference

The following clinicians have been consulted and agreed this patient information: Consultant Respiratory Physicians: Dr J. Wilkinson & Dr N. Sharma

The directorate group that has agreed this patient information leaflet: Medicine Division Endoscopy

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