

# Lung cancer surgery at Guy's Hospital

This information booklet describes what to expect from the time of admission for your lung surgery to when you are discharged (sent home) from hospital. It will also provide practical advice about resuming activity once you are home. If you have any questions or concerns, please talk to your nurse case manager (see page 9 for contact details).

## Your operation

As discussed with you at your clinic appointment, your surgeon has recommended one of the following operations:

### Median sternotomy

The surgeon makes an incision (cut) vertically down the chest over the breastbone, which allows access to both left and right side of the chest.

### Video-assisted thoracoscopic surgery (VATS)

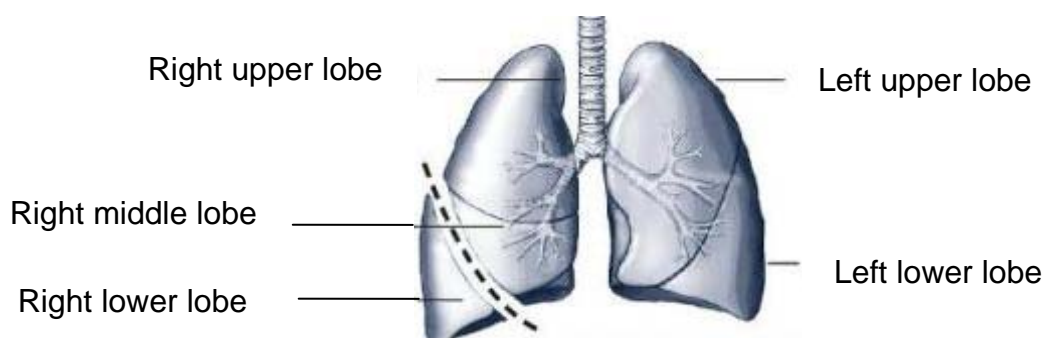
This is a type of keyhole surgery. Your surgeon uses a camera to look at the lung through two or three small cuts (3cm-5cm) into your chest. These cuts are generally made under the arm or just below the shoulder blade.

### Thoracotomy

Your surgeon makes a cut around the side of your body, below your shoulder blade and between your ribs. During the operation, depending on the extent of your lung disease and your overall general health, you may need one of the following operations listed on pages 1-2. Sometimes, during the operation, your surgeon may find that the disease is not suitable for surgery. When this happens, we will discuss alternative treatments with you. Your consultant (senior doctor) will see you on the day of the operation about the outcome.

### Lobectomy

This means removal of a lobe (part) of the lung. The right lung is divided into three lobes and the left lung into two lobes (see picture below).



Picture courtesy of The Roy Castle Lung Foundation

Your surgeon will remove the lobe (or lobes) that are affected. The remaining lobe or lobes will then expand to fill the space. Removing a lobe (or lobes) may cause some alteration in your breathing, but in the long term this should not prevent you from leading a normal life after your surgery.

### **Pneumonectomy**

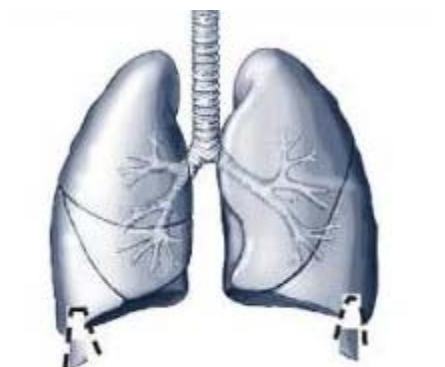
This involves removing a whole lung (see picture below). The remaining lung will then need to work a bit harder but will soon become used to the workload. You will be able to do most things you did before, although some people find that they are unable to do demanding physical activity. You may notice you become a little more breathless than before.



Picture courtesy of The Roy Castle Lung Foundation

### **Segmentectomy/ wedge resection**

Each lobe of the lung is made up of several sections. If your physical condition will not allow more extensive surgery, or the cancer is small, the surgeon may be able to remove just a segment, or small piece of lung tissue, rather than the whole lobe (see below).



Picture courtesy of The Roy Castle Lung Foundation

## **What are the benefits of lung surgery?**

The benefits of having lung surgery depend on your diagnosis.

In the case of operable lung cancer, surgery represents the best possibility of a cure. In other lung diseases, surgery may lead to an improvement in your quality of life.

## **What are the alternatives?**

This will depend on your diagnosis but may include treatment with a combination of drugs, (chemotherapy) and/or radiotherapy. Your doctor will discuss these alternatives with you before you decide to go ahead with lung surgery.

## What are the risks of lung surgery?

Risks of lung surgery include:

- air leak from the lung
- bleeding
- a blood clot in the leg (thrombosis or DVT)
- a blood clot in the lung (pulmonary emboli)
- chest infection
- respiratory failure
- wound infection
- breakdown of the lung structures.

Most of these potential risks are fairly small but it is important to note that the risk of getting a complication varies depending on individual circumstances and the type of lung surgery needed. The doctor will explain and discuss these risks/complications with you when they ask you to sign the consent for the operation. Your doctor will also tell you how these complications can be treated.

## How long will I have to wait for my surgery?

Your surgeon will discuss a date for surgery with you when you meet them in clinic. We will send you a letter giving you details and the date that you need to come into hospital, or we may phone you.

On the day of admission, please phone the nurse in charge of the ward to confirm your bed availability. Occasionally, when we are very busy, we may have to cancel your surgery and reschedule a date for you as soon as possible.

When you know that you will be coming into hospital, remember to make arrangements for the care of any dependent relatives, children and pets.

Give some thought about coping after leaving hospital, as during the first week you will need practical as well as emotional support. If possible you should arrange this before your admission. If nobody is going to be available to help with this, please tell the nurse case manager at your clinic appointment or hospital admission so we can help you to make arrangements.

## I am a smoker – is it worthwhile giving up?

After your operation your lungs will need to be at their best to aid recovery. If you are a smoker, you should try to give up as soon as possible, ideally at least six weeks before your operation.

Giving up smoking before your operation will significantly reduce the chances of serious complications after surgery, such as chest infections (pneumonia). Long-term benefits include reduced risks of heart disease, strokes and cancers.

If you need help giving up smoking, please talk to the nurse case managers who can refer you to your local smoking cessation services (Smoke Stop Clinic). There is online support from the NHS available to help you quit smoking:

**w:** [www.nhs.uk/smokefree](http://www.nhs.uk/smokefree)

**Smokefree National Helpline:** 0300 123 1044

## Pre-operative tests

You may have some of the following pre-operative tests to ensure that you are well enough to have an anaesthetic and the planned operation.

You will either have these tests at a pre-assessment appointment in the run-up to your operation, or you may have them the day before your operation. We will write to tell you when you need to come in for the tests.

### Electrocardiogram (ECG or heart tracing)

This looks at the rate and rhythm of the heart.

### Blood tests

These provide information on aspects of your overall health, as well as your blood group.

### A chest X-ray

This provides information on the size and shape of your heart and the general condition of your lungs.

### MRSA swabs

As part of your pre-assessment you will be screened for MRSA (methicillin resistant staphylococcus aureus). This is a painless procedure where your nose, throat and groin, and any open wounds are screened by using a swab.

If you are found to have an infection, we will notify you and your GP who will prescribe treatment for you to use before you can be admitted. For more information about MRSA, please ask a member of staff for the leaflet **MRSA screening – what to expect**.

## What happens when I arrive at hospital?

You will be admitted to Dorcas ward on the ninth floor of Borough wing (located in the green zone).

You will meet several people before your operation including those listed below.

**Members of the nursing staff** will show you around the ward and help you to settle in. The nurse will weigh you and take your temperature, blood pressure, pulse and breathing rate. You will be asked about your general health, your family and carers. The nurse will tell you what to expect before and after surgery.

A **doctor** from the thoracic surgical team will examine you and ask you various questions about your health. They will discuss with you what the operation is likely to involve as well as the risks and benefits. The doctor will write the main benefits and risks associated with the operation on the consent form before you sign it. This indicates that you agree to the operation, so it is important that you have discussed it fully with the doctor and understand what is involved. You can withdraw consent at any time before surgery.

As your surgery will be performed under general anaesthetic you will also meet an **anaesthetist**, who will ask you questions related to your general health and any medication you may be taking. They will discuss pain management options with you. You should receive a copy of our leaflet **Having an anaesthetic**. If you have not, please ask a nurse for one.

## **Can my family and friends stay with me before the operation?**

Your family and friends are welcome to stay with you until you go into the operating theatre. If you wish, they can stay on the ward while you have your operation – our staff will be happy to keep them updated on your progress. They cannot stay during the rest period but are welcome to wait in the day room if you are in theatre during the rest period (1–3.30pm).

## **What happens before my operation?**

The anaesthetist may prescribe medicine (pre-med) to help you relax and make you feel sleepy before the surgery. Not all patients will be given a pre-med but if needed you will receive it about one to two hours before your surgery. Following this we advise you to stay in bed for your own health and safety.

You will be given clear instructions about when you should stop eating and drinking before your operation. This is known as 'fasting' or 'nil by mouth', and is to prevent you from being sick during the operation. You will not be able to eat from midnight the night before.

We will give you support stockings to wear throughout your stay in hospital to help prevent a blood clot from forming in your legs. You will also be given a daily injection with a medicine that will help to prevent this complication.

We will ask you to change into a cotton gown which ties at the back.

When it is your turn to go to theatre, a nurse and a porter will take you there. Once you arrive in the anaesthetic room the theatre staff will check your details and check your consent form.

We will attach monitors to you to measure your blood pressure, heart rate and oxygen levels continuously.

We will insert a small needle into the back of your hand. We will use this to give you the medication that will help you fall asleep.

The theatre staff may start a drip to prevent you from becoming dehydrated. We may pass a catheter into your bladder to enable you to pass water easily, and so we can accurately monitor your urine output.

After this you will be taken into the operation room where the surgeon and their team will carry out the operation.

## **What happens to me after the operation?**

When the surgeon has finished operating you will be taken into the recovery room where you will wake up from your anaesthetic. You may feel a little confused and unsure where you are. The nurses and doctors will monitor you closely until they feel you are ready to leave the recovery area. They will give you some oxygen and check that your pain relief is adequate.

Once you start to wake up you may notice a few tubes and wires attached to you. These are there to help with your monitoring. A chest drain is usually inserted to remove any fluid or air collections that may build up as part of the surgery.

## What happens to me after I leave theatre?

When you leave theatre you will spend time in the recovery unit before being transferred back to the ward. You will feel drowsy but you will be easy to wake.

During the first few hours of your return, the nurses will be busy making you comfortable and setting up the monitoring equipment, drips and checking your pain relief. You will have an oxygen mask on to help your breathing.

We will give you given analgesics (painkillers) for as long as you need them. The type of medicine will depend on the extent of your surgery and the amount of discomfort you experience.

Pain should be treated early rather than letting it get worse, so if at any time you find it difficult to move or breathe deeply, let the doctors or nurses know.

In the first few days after your surgery you will require strong painkillers. These may be given through the epidural (a fine tube placed in your back), as an injection or by mouth (tablets, capsules or liquid).

Alternatively, we may give you patient-controlled analgesia (PCA). This provides constant delivery of a certain dose of painkiller into a vein in your arm which you can top up – if needed – by pressing a button on a handset.

Our booklet **Having an anaesthetic** has more information on pain control after your operation.

Occasionally patients experience side effects of using these forms of pain relief. The main side effect you may experience is nausea (feeling sick). This can be helped with regular anti-sickness drugs. Other side effects include drowsiness, itching and constipation. Please tell your nurse or doctor if you experience any of these side effects.

You will be discharged home with painkillers that are appropriate to manage your pain.

You will also have one or two chest drains depending on what operation has been performed. These drains remove any old blood or air left over from surgery and may make a sound similar to rain falling. This is normal and nothing to worry about. The drains remain in position until the surgeon is happy that the lung is fully inflated or that drainage is minimal. Usually the drains are put on suction to help the lungs expand. We will encourage you to get up and about, even with drains in place. There is more information about chest drains below.

We will help you get up and out of bed on the first morning after your surgery. The physiotherapists will encourage you to breathe deeply, cough, move around and exercise your arms and shoulders (especially on the operation side).

In the days following surgery the physiotherapist will encourage you to sit in a chair by the bed and later to walk around the ward. This can help prevent a chest infection and blood clots in the legs.

## Eating and drinking

Once you are fully awake and feel able to, you can have something to eat and drink. You may not feel the need to eat a full meal until the next day.



## Will I feel sick?

Some of the pain relief and the anaesthetic can make you feel sick. This does not happen to all patients but if you have previously had a problem with nausea and vomiting, please speak to the nurse case manager or the anaesthetist. You can also ask the nurses caring for you for some anti-sickness medicine to ease this.

## Chest drains

Following your operation, you may have one or two tubes near your operation site. These plastic tubes (chest drains) remove any excess air, blood or fluid from your chest so that your lungs can expand. The drains may be in for several days and will be removed by the nursing staff once your lung has fully expanded. When the drains are removed a stitch will be tied at each drain site. The stitches will be taken out after five days.

If you are discharged before the drains are removed, we will arrange for the district nurse or practice nurse to do this for you.

Two nurses will remove the tube and seal the hole with a stitch that was inserted in theatre. Most stitches are dissolvable except the one(s) used when your chest drain(s) are removed. Sometimes clips or staples are used along the wound. Your nurse will advise you if any stitches or clips need removing by your GP or district nurse.

## Can my friends and family visit me?

Your friends and family are welcome to visit you on the ward. Visiting times are 9am to 1pm and 3.30pm to 8.30pm. We have a rest period between 1.30pm and 3pm, but if you wish you can see your visitors in the ward day room during this time.

## What happens each day after my surgery?

### Day one

The lung surgical team (the senior doctor and nurse in charge of the ward) will conduct a ward round every morning of your stay to discuss the operation with you and the day's actions based on your individual progress. You will have a repeat chest X-ray and blood tests. Some drips may be removed. The monitoring equipment may not be required and can be removed.

The physiotherapist will work with you on your breathing and coughing, and moving around using your arms and shoulders. This is to prevent stiffness. Dorcas ward has a gym facility with equipment and a steam room for you to use during your stay.

After breakfast the nurses can help you with washing, should you require it.

### Day two

The surgical team will visit you and decide about removal of further equipment such as your epidural/PCA. We may remove a chest drain and the catheter. We will do another chest X-ray.

### Day four

On this day you will have a discharge talk with the nurse case manager (specialist lung nurse) and the physiotherapist. It is a group meeting where all the patients who have had their surgery meet and discuss how to manage at home after discharge. It is an opportunity for you to ask questions and chat with other patients. The physiotherapist will go through a rehab and exercise programme with you that you can continue at home.

Once you are eating and drinking, and any problems identified have been addressed, we can discharge you (send you home). Some patients do need to go home with a chest drain if longer-term drainage is required.

Before you leave the hospital we will ensure that your pain is well controlled, that your bowel function is returning to normal and that you are able to move and walk upstairs.

## **What will I take home?**

We will give you your medication. We will make sure you have 14 days' supply of the medicines you need to take home with you. The pharmacist and your nurse will discuss how and when you should take your medicines. You will need to see your GP for further supplies of medication.

We will also give you:

- a letter to your GP
- a letter for your practice or district nurse letter (if required) the contact details of the thoracic nurse case manager
- your telephone follow-up details
- chest drain information and equipment (if required).

## **When will I know if my operation has been successful?**

The surgeon will be able to tell you straight after the operation how much of your lung tissue was removed, but will not be able to be specific in relation to the cancer.

The biopsy results of the cancer and the lymph nodes take roughly seven to 14 days to process, and are usually given to you in your first clinic appointment after you have left hospital.

At this appointment, the doctor will discuss whether any further treatment is required. If the surgery has not completely removed the cancer cells or there is high risk the cancer may reoccur, you may be offered chemotherapy or radiotherapy treatment. If this is necessary, you will be referred to a specialist cancer doctor who will discuss this fully with you.

## **Will I be able to look after myself?**

You will be able to care for yourself, for example washing and getting dressed. You will probably be most comfortable in loose fitting clothing. Women may find bras uncomfortable for a little while. You may have a bath or a shower but do not scrub the wound or use perfumed products. Although you will be able to cook, do not lift heavy pots and pans.

If you live on your own, you will need to arrange for someone to stay with you or you will need to stay with a family member or friend for a period of two weeks.

If you cannot arrange this, discuss this with your nurse case manager at your outpatient appointment and we will help to plan your discharge arrangements with you.

## **Patient transport service**

If you need to use our patient transport service, a member of our team needs to assess whether you are eligible at least 48 hours before your surgery. This involves a brief telephone interview and is completely confidential.

If you think you may be eligible for this transport service, please contact the patient transport assessment team on 020 7188 2888.



## Useful contacts

### Dorcas ward

**t:** 020 7188 8840

**Surgeons' secretaries** – contact regarding dates to come in (Monday to Friday 9am–5pm; answerphone out of hours):

**Ms Karen Harrison Phipps  
(Secretary: Tracey Waitt)**

**t:** 020 7188 7943

**e:** tracey.waitt@gstt.nhs.uk

**Miss Juliet King  
(Secretary: Kay Chapman)**

**t:** 020 7188 1034

**e:** kay.chapman@gstt.nhs.uk

**Mr John Pilling  
(Secretary: Paula Allen)**

**t:** 020 7188 1038

**e:** paula.allen@gstt.nhs.uk

**Mr Tom Routledge  
(Secretary: Sally Baker)**

**t:** 020 7188 1069

**e:** sally.baker@gstt.nhs.uk

**Mr Lukas Veres  
(Secretary: Lauren Martinez)**

**t:** 020 7188 7188 (extension 52740)

**e:** lauren.martinez@gstt.nhs.uk

**Mr Andrea Bille  
(Secretary: Lauren Martinez)**

**t:** 020 7188 7188 (extension 52740)

**e:** lauren.martinez@gstt.nhs.uk

### Nurse case managers

**t:** 020 7188 1020 (Monday to Friday 9am–5pm; answerphone out of hours)

If we do not answer, please leave a message with your name and contact details and we will get back to you within 24 hours Monday–Friday or the next working day.

To bleep a member of staff call the hospital switchboard on **020 7188 7188** and ask for the bleep desk. Ask for the relevant bleep number below and wait for a response.

**Sophia Holden**

**bleep:** 2786

**t:** 020 7188 1020

**e:** sophia.holden@gstt.nhs.uk

**Rebecca Myatt**

(Monday, Tuesday and Friday, 9am–3pm)

**bleep:** 2322

**t:** 020 7188 5155

**e:** rebecca.myatt@gstt.nhs.uk

**David Gammon**

**bleep:** 2893

**t:** 020 7188 0952

**e:** david.gammon1@gstt.nhs.uk

### Accommodation for relatives

Please speak to a member of staff regarding your accommodation requirements; they will be willing to help you.

**t:** 020 7188 0439





**Dimbleby Cancer Care** provides cancer support services for Guy's and St Thomas'. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy's. **t:** 020 7188 5918 **e:** [DimblebyCancerCare@gstt.nhs.uk](mailto:DimblebyCancerCare@gstt.nhs.uk)

### Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the clinical nurse specialist or other member of staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

### Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS) **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints) **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

### Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

**t:** 020 7188 8815 **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

### NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

### NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

### Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

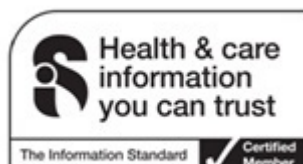
**t:** 0800 731 0319 **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk) **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

**Leaflet number: 2512/VER6**

Date published: September 2016

Review date: September 2018

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