Caring at its best

NHS
University Hospitals of Leicester
NHS Trust

Chest and lung surgery

Department of Thoracic Surgery

Information for Patients

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Glenfield Hospital, Groby Road Leicester LE3 9QP

Ward 26 Tel: 0116 258 3666 / 0116 250 2484

Surgical Enhanced Care Unit (SECU) Tel: 0116 258 3251

Thoracic Nurse Specialist Tel: 0116 250 2552

Consultant's name: ……...

Admission date: ……

Procedure: ……..

……...

Approximate length of stay: ……

Introduction

This booklet is a guide to give you and your family information about your operation and aims to help reduce anxiety about coming into hospital.

There are many different reasons for chest and lung surgery. This means that your care or treatment may vary from what is written in this booklet.

The booklet is designed to work alongside the consultation with the doctors and nurses.

If you would like further information please speak to your medical team on admission or contact the thoracic nurse specialists.

What is enhanced recovery?

The Enhanced Recovery Program (ERP) helps people to recover more quickly after having a major operation. Studies have shown that the earlier a person gets out of bed, starts moving around, eating and drinking after their operation, the quicker they get better.

Your involvement is essential to the success of ERP as **you need to be actively involved** in your recovery from surgery.

This booklet helps set goals for you to work towards in your recovery, and to understand what **we expect from you** on each day.

Patients on enhanced recovery pathways:

- leave hospital sooner.
- feel better sooner.
- return to normal life sooner.

How should I prepare for my surgery?

1. Stop smoking

Stopping smoking is good for your health at any time but is particularly important before your operation as smoking increases the risk of complications.

If you need some help:

- contact your local NHS Stop Smoking Service for free group or one-to-one help and advice from trained experts. Let them know that you are going to have an operation so they can give you priority.
- ask your GP if they have a registered Stop Smoking Advisor who can help you to stop.
- ask your local pharmacist if they have a trained Stop Smoking Advisor you can see for free one-to-one help and support.
- the NHS Smokefree helpline and website are there to give free advice, help and support. Call 0300 123 1044 or for online help and support visit www.nhs.uk/smokefree
- ask the thoracic nurse specialist to refer you to a stop smoking service when you are in clinic.

2. Limit the amount of alcohol you drink

Do not exceed national recommendations which are currently 2 to 3 units per day for women, and 3 to 4 units per day for men. We should all have at least 2 alcohol free days per week.

If you are worried about your drinking, then feel free to contact our Hospital Alcohol Liaison Team on 07535 658329 or 0116 258 7285.

Stopping smoking and limiting your alcohol intake will help your recovery.
For any problems please contact the thoracic nurse specialist on 0116 250 2552 or your GP.

3. Eat well - your body needs fuel to repair

Good nutrition is always important but it becomes even more important before and after surgery.

A healthy balanced diet will give your body the nutrients it needs to fight infection and repair tissues.

Studies have shown that people who are underweight and malnourished or overweight have more complications after surgery. People who are a healthy weight and well-nourished will heal and recover more quickly.

Before surgery your nutritional state will be assessed using a scoring tool. If you are identified as being malnourished or at risk of malnutrition (this means you are eating and drinking too little, or have unintentionally lost weight) you may be referred to a dietician. You may also be prescribed supplement drinks.

For most people a healthy balanced diet includes:

- fruit and vegetables - aim to eat at least 5 portions per day. Make sure you have a variety and choose from fresh, frozen, tinned, dried or juiced.
- starchy foods at each mealtime, for example, rice, bread, pasta and potatoes. Choose wholegrain varieties when you can.
- protein-rich foods such as meat, fish, eggs, beans, lentils or nuts. These should be eaten at least 2 times a day.
- milk and dairy foods each day. Try low fat versions if you need to lose weight.

If you are found to be overweight, then you should try to take steps to lose weight before surgery. This will reduce your risk of complications (particularly breathing and wound problems).

- You should do this sensibly by continuing to eat a healthy balanced diet that includes all the 4 food groups listed above.
- It is important that you continue to eat regular meals but you could cut down on food and drinks high in fat and sugar and eat smaller portions.
- If you need to snack between meals, choose healthy snacks. Good eating habits now will help you after your surgery.
- Limit foods high in fat, sugar and salt.

4. Increase your fitness

We want you to get better as soon as possible after your operation. To do this, we encourage you to do some kind of physical activity, to get as fit as possible for your operation.

Physical activity means day to day activities like walking and housework.

The exercise you do will depend on your level of fitness, but it is important for you to find ways of introducing exercise into your daily routine. The stronger and fitter you are before the operation the sooner you are likely to go home after the operation.

It is important to continue to be active whilst you are in hospital. If you are admitted the day before your surgery please stay in your day clothes and do not sit/lie on your bed until night time.

5. Sleep and rest

As well as staying physically active before your operation, remember to get enough sleep and rest too. Try to relax. Try not to worry and get together with family and friends.

6. Make plans for coming into hospital and going home after your operation

- Think about how you will travel to the hospital. You might have an early start.
- Take off all nail varnish from fingers and toes (including false nails) before you come into hospital as this has to be removed before surgery.
- Think about how you will get home from hospital. You will be given the date that we expect you to be discharged. Make sure friends and family know when this will be.
- Check that you have enough support in place for when you go home. You might need extra help at first, especially with housework, gardening etc.
- Please remember you may not be able to drive after surgery for up to 6 weeks and you will have to tell your car insurance company that you have had surgery.
- Before going into hospital it is sensible to stock up your freezer so you do not have to worry about shopping immediately after you are discharged.
- If you are the primary carer for someone, think how this person will be looked after while you recover.

What should I bring into hospital?

- Please bring all medicines that you are presently taking in their original packaging, and if possible a prescription list of your medication.
- If you normally use a walking aid or have glasses, dentures or hearing aids, please make sure you bring these with you.
- Comfortable day clothes to put on as soon as possible after your surgery (Ward 26 is a mixed gender ward with separate male and female bays). Day clothes will allow you to get up sooner and move around the ward whilst maintaining your dignity.
- A pair of well-fitting, flat, comfortable slippers or shoes.
- At least 2 clean sets of nightwear with loose fitting tops; pyjamas are recommended.
- A dressing gown.
- Your antibacterial wash and nasal ointment (if given in clinic).
- Toothbrush and toothpaste, comb, shaving items and tissues.
- A pen for completing any paperwork such as menu cards.
- A small amount of loose change for the telephone, newspapers, etc. (please note there is a television and phone above most of the beds but you have to buy cards to use them).

Please do not bring towels into hospital with you. You will have hospital towels.

Please do not bring any valuables or large amounts of money into the hospital.

If you want to bring electrical items into hospital with you such as mobile phones/ laptops/ iPad, please be aware that the hospital does not accept responsibility for loss or damage during your stay. Be respectful to other patients and have your phone or audio equipment on silent or use headphones.

About Ward 26

Ward 26 is on the first floor at Glenfield Hospital. It has 25 beds for patients having lung and chest surgery. This will be the ward you are admitted to, and discharged home from.

About Surgical Enhanced Care Unit (SECU)

This is a specially adapted high dependency unit with 12 beds. Most of our patients will go back to SECU after their operation for 24 to 48hours. We are able to check patients closely in this area.

Due to the limited number of beds available in SECU, both male and female patients may be cared for in the same bay. Privacy and dignity are maintained at all times.

Visiting times

Visiting times across Ward 26 and SECU are 2pm to 8pm.

We ask visitors to keep their numbers to a maximum of 2 per bed and stick to the visiting times if possible. If you have any difficulty with these times, or any problems regarding visiting, please talk to the nurse in charge on Ward 26/SECU.

Be aware that the ward has ‘protected meal times’ This means you will be asked to leave the ward whilst patients have their meals. This is to make sure that patients nutritional needs can be met.

Admission date

Surgery is usually done within a few weeks of your outpatient visit. A letter will be sent to you giving you details of the date and time to come into hospital, or you may be contacted by phone. If you have any problems with the date of admission please call your consultants secretary.

Note - if you can go home on the same day of surgery, you must not drive yourself.

If you are coming into hospital on the day of surgery:

Your consultant may have agreed that you can come into hospital on the morning of your surgery. If this has been agreed please follow the instructions below:

- 48 hours before admission please start to use the antibacterial wash and the nasal ointment as instructed and given in clinic.

The night before you are due to come into hospital:

- shower using the antibacterial wash and go to bed as normal.
- you can eat and drink normally up to 2am.
- from 2am to 6am you may only drink water; please have a glass of water at 6am as recommended by the anaesthetic doctors.
- after 6am nothing to drink, and please do not chew gum.

Do not take your medication on the morning of surgery unless otherwise directed or clarified when you arrive at the hospital.

Please phone ward 26 on **0116 258 3666 or 0116 250 2484** to check if a bed is available before leaving home. This will be early, but nursing staff will be there to answer the phone.

Plan to arrive at the hospital between 7am and 7.30am unless told otherwise. Go straight to Ward 26 on the first floor at Glenfield Hospital.

If you are coming into hospital on the day before surgery:

If you are admitted the day before surgery, you will be asked to call ward 26 on the morning of your admission between **10.00am and 10.30am,** to check a bed is available. The contact numbers for Ward 26 are **0116 258 3666 or 0116 250 2484**. The nursing staff will confirm your admission and the time to arrive.

On the day before your operation, we encourage you to eat and drink normally and keep moving as this will help with your recovery.

What happens when I am on the ward?

When you arrive you will be shown to your bed area. Sometimes you may need to wait whilst your bed area is prepared. We have a small dayroom, which we share with the ward next door, where you can wait.

Do not put on nightwear or get into bed at this time. You can stay in your day clothes and it is important to remain active. It is better for you to be sitting in the chair rather than in bed.

You will be asked to have a shower using your antibacterial wash and put on a hospital gown, a pair of disposable pants and a pair of stockings to help prevent any blood clots whilst you are in hospital.

You may need to have some more routine tests done to prepare for your procedure. The staff will explain these to you.

One of the doctors will come to see you, ask about your medical history, examine you and complete your consent form with you. You may also be seen by one of the anaesthetic doctors.

You will be given the opportunity to ask any questions you may have.

When you are in hospital you will be given an estimated date of discharge, to allow you to plan your transport home and your recovery. The doctors will see you every day to check your progress and plan your ongoing management. They will keep you updated of this.

What happens on the day of surgery?

- We will make you 'nil by mouth'. You will usually be allowed to have a glass of water at 6am.
- You will be asked to have a shower using your antibacterial wash and use your nasal ointment.
- You will be asked to put on a theatre gown (ties at the back), a pair of paper pants and some stockings to help to prevent blood clots.
- The doctors may come and draw a mark on your skin on the side where your surgery will take place.
- Please be a 'patient' patient as you may have to wait a long time. A friend or member of your family can be with you whilst you wait to go to theatre. **Please be aware that the time or order of your surgery may change on the day due to emergencies and other reasons.**
- When it is your turn to go to theatre, the nurse who is looking after you and a theatre assistant will take you to the theatre reception.

What happens in theatre?

Theatre reception: family members are not allowed beyond theatre reception. Theatre staff will check your details. You will then be taken into the anaesthetic room.

Anaesthetic room: whilst you are in this room the staff will also insert some of the '**tubes and lines'** described below. These are there for monitoring, giving you fluids and medication and removing unwanted fluid from your body. The staff will explain what they are doing, they understand you will be feeling anxious.

You will have a needle inserted into the back of your hand so the anaesthetic staff can give you drugs that will send you to sleep.

Operating theatre: this is where the surgeon and his team will carry out your operation. The time spent in theatre is dependent on the surgery you are having and varies for each person.

Recovery area: when your operation is done you will be taken into the recovery room. This is where you will wake up from your anaesthetic. You may feel quite disorientated and confused at this time.

The recovery nurses will be checking you very closely until you are awake enough to make the trip back to the ward. They will be setting up your painkillers and will ask you whether you have any pain, to check that they are working well. You may find you have quite a few lines, wires and tubes.

You will be given extra oxygen through a facemask, which you must keep on.

Once you are awake and comfortable in recovery you may have X-rays and blood tests before coming back to the ward.

Tubes and lines: as you start to wake up you will notice you have quite a few tubes and wires. This is not the same for everyone and will vary depending on your operation.

Oxygen: extra oxygen is given to you for the first few hours to help your lungs. The facemask may be changed to a small soft tube that sits just inside your nostrils. This leaves your mouth free to take sips of water.

Central venous line: this goes into a large vein in your neck or below your collarbone. It is used to check the fluid levels in your body or to give drugs or fluids.

Intravenous drip: a plastic tube in one of your smaller veins is used to give fluid drips and also medications. It is usually put in the back of your hand. Care should be taken not to move or knock the tube.

Oxygen saturation probe: a small peg like device clipped to your finger that will read the level of oxygen in your blood.

Arterial line: another small plastic tube but this one goes into an artery in your wrist. We can use this to check your blood pressure and take blood samples. Care is needed as if knocked or caught this can bleed quite heavily.

Urinary catheter: this is placed into your bladder. This allows us to measure your pee (urine) output. It is usually removed within 1 to 2 days of your procedure.

Epidural or paravertebral infusion: these are to deliver pain relief. This is important to keep you comfortable after your surgery. Being comfortable helps you to deep breathe, cough and start moving around. This will help you to recover as quickly as possible.

Chest drain(s): you may have 1 or more flexible plastic tubes inserted at the end of the operation. These allow drainage of air and fluid from the chest. This helps your lung to re-expand.

A vacuum pump may be connected to your chest drain(s) to help with drainage and re-expansion.

We will be able to check on the progress of this by looking at your chest X-rays. You will usually have a chest X-ray every day.

It is important that you keep walking around whilst you have chest drains. This helps the lung to re-expand.

Returning to the ward

When you first come back to the SECU/Ward 26 the nurses will take some time to set up your monitoring equipment and drips. If you feel comfortable your relatives may wish to see you for a short while.

Eating and drinking: after some operations you may not be allowed to eat and drink. In this case you will be given mouth care and have a drip (infusion) to maintain comfort and hydration.

If you are allowed to eat and drink staff will give you a drink of water. It is a good idea to just sip this at first. If you wish you can then have something to eat.

Pain control: any type of surgery can be painful and so it is essential that you have enough painkillers. Strong painkillers are used immediately after surgery. These may be given in several ways such as:

- into your back (epidural/ paravertebral infusion) through a very fine tube.
- through a drip in your arm.
- an injection.
- tablets.

You may have a pain control button that you can press to give yourself more painkillers. Your nurse will show you how to use it.

Moving around: the sooner you start to move around after surgery, cough and breathe deeply, the better this is for your recovery.

This helps you to clear any sputum (phlegm/ secretions) off your chest. This reduces your risk of chest infections.

Being active also reduces the risks of blood clots, muscle weakness and pressure sores.

After your procedure staff will help you to get out of bed and sit in your bedside chair. This could be on the same day as your procedure, or the morning after. Please do not attempt to do this on your own.

Day 1 after surgery

The medical team will come to see you. The nurses will remove some of your wires and tubes. We may continue to check your blood pressure, pulse, temperature and oxygen levels at regular times throughout the day. We will also be checking your wounds and tubes.

Hygiene: today you may be helped to wash. You may feel well enough to get dressed. If not we will help you to change into your own nightwear.

Moving around: today you will be helped to sit in the chair. You should sit out of bed for a at least 6 hours. You should change position every 1 to 2 hours to relieve the pressure on your bottom.

As soon as you are out of bed, it is essential that you start to exercise. Deep breathing and supported coughing will help to remove secretions (phlegm).

The physiotherapist may take you for a short assisted walk today around the ward or ask you to walk on the spot.

You **will** feel short of breath after exercise, this is normal after lung surgery.

Exercising will encourage your lungs to expand and can help you go home sooner.

Eating and drinking: you should try to eat and drink today unless you have been told not to. Try to eat something at each mealtime, as nutrition is important in your recovery. If you feel sick (nauseous) please tell the medical team.

Pain relief: you may have an epidural or a pump for your pain. Unless you are nil-by-mouth, tablet painkillers will be given today. The nursing team will ask you at regular intervals if your pain is well controlled.

Going to the toilet: you may have had a catheter inserted to help you pee, or you may be using the toilet. Please tell the nursing team if you pass wind or have a poo as we need to check this after surgery. The catheter may be removed today.

Rest and sleep: it can be difficult to sleep in hospital. You may feel tired and drowsy for a few days. As you become more active, your sleep will return to a normal pattern.

Posture: it is important to maintain a good posture to avoid unnecessary strain on your spine, which can cause back pain and restrict the movement of your lungs and rib cage.

Shoulder exercises: after surgery you may find your shoulder is stiff due to the position it was placed in during surgery. The exercises shown on the next page will help get back your range of shoulder movement.

Try and do these exercises regularly. Spend a few minutes on these exercises everyday. Everyday activities such as brushing your hair, getting dressed and reaching for light objects will also prevent shoulder stiffness.

Breathing exercises:

Deep Breath in through your nose until your lungs feel full.	→	Hold your breath for 3 seconds	→	Breathe out through your mouth. Repeat 5 times.	→	X 1 Cough

Repeat this cycle of breathing exercises hourly during the day.

Breathing exercises will help you to expand your lungs and clear any mucus you may have.

Getting ready for home

Chest drain removal: your operation may have needed the use of 1 or more chest drains, 1 of these may be removed today.

The stitches from your drain sites need to be taken out after 7 to 10 days. This is done at your GP surgery. Your nurse will give you a letter that tells you the date for this. **You will need to make an appointment**.

Looking after your wound: it can take 2 or 3 weeks for your wound(s) to heal. Whilst in hospital the nurses will check them regularly to make sure they are healing well.

You will need to check your wound(s) after you have gone home. Use a mirror or get a member of your family to check your wound(s) every day.

Some swelling around the wound is normal and should go down after a few weeks.

Try to avoid using soap, cream, and talcum powder directly on the wound, as this can cause irritation. It is normal to get numbness around the scar and in patches around your chest after the surgery. This can last for several weeks.

Before you go home your nurse will tell you if any stitches or clips need to be taken out by your GP or district nurse.

You should contact your GP for advice if you notice:

- the wound becoming red and inflamed.
- pain around the wound getting worse.
- fluid oozing from your wound.

Discharge home: the length of your hospital stay will vary depending on your surgery. You will be discharged when the time is right for you.

Please ask the nursing staff about the time when your relatives can collect you. You can also ask them for a fitness-to-work certificate (sick note) for your employer if needed.

Medication: in most cases you will be given a 7 day supply of all the necessary tablets/ medication. All tablets are labelled with how and when to take them. Your nurse or the pharmacist will discuss this with you and with your relatives if needed, before you leave.

You will need to see your GP for further supplies of medication.

Pain: it is common for aches and pains to continue for a little while. Remember to:

- take your painkillers as prescribed.
- tell your GP if the painkillers are not working.

Sometimes aches and pains can stay for up to 3 to 4 months.

Other areas may feel numb or you may get ‘pins and needles’ on or near the site of your surgery. This usually passes with time.

Please discuss any concerns with the doctors at your follow-up outpatient appointment, or you can contact the thoracic nurse specialist on 0116 250 2552 if needed.

At home

Exercise: once home, you should continue to walk regularly. Aim to go for a short walk each morning and afternoon. Slowly build up the distance and pace you walk. You may find that you feel more breathless when walking. This is normal and proves that you are exercising your lungs.

If you do any specific activities or sports for example swimming, golf, gym or bowls, ask your physiotherapist/ doctor for advice on when you can return to these.

Sleep: you may find that you do not sleep as well when you first get home. Your natural “body clock” will have been interrupted by hospital routines. This will soon return to your normal pattern.

Eating: sometimes appetite is reduced after an operation and you may lose some weight. You should try to eat small meals that contain more calories than you would normally eat.

Constipation: this can sometimes result from reduced mobility and the painkillers you may be taking. Eating 2 to 3 pieces of fruit and 3 portions of vegetables a day can help with this problem. Contact your GP if this continues as you may need to take laxatives for a short while.

Emotions: any sort of operation can affect people emotionally and mentally. It is usual to have feelings of anxiety or depression. Try talking about your feelings; remember your friends and family need to talk things over as well.

Try to set realistic goals.

Sex: you can have sex when your wounds are healed, within the limits of your comfort and when you and your partner are ready. This may take several weeks.

Remember your partner may be worried about hurting you. Try taking a more passive role.

Driving: you may not be able to drive for up to 6 weeks after surgery. Please check with the doctor at your follow-up appointment when you can start to drive again.

It is essential that you can do an emergency stop without pain, when you start driving again.

Remember to tell your insurance company that you have had surgery.

Work: you can return to work when you feel comfortable and well enough. This will depend on your job and the surgical procedure you have had.

Please ask the medical staff for advice at your follow-up appointment or talk to your GP.

Concerns: if you have any questions or concerns once you are at home, you, your family, district nurse or GP can contact the thoracic nurse specialist on 0116 250 2552 or Ward 26 on 0116 258 3666.

If needed the thoracic nurse specialist can arrange for you to come to hospital to be checked.

Your follow-up appointment at the outpatient clinic

After discharge you will be asked to attend the outpatient clinic for a follow-up appointment. This is usually between 2 to 4 weeks after discharge.

You will get a letter when you get home telling you the date and time of your appointment.

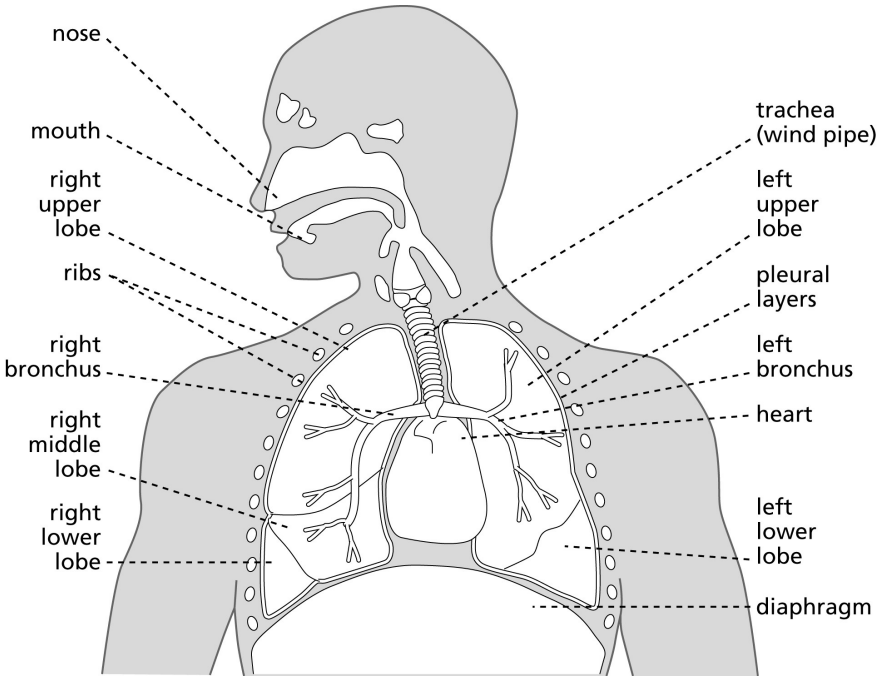
At this appointment you will normally have a chest X-ray.

We will check any wounds, ask questions about your recovery so far, and give you the results of your procedure. We will also discuss if any further treatment is needed.

The lungs and lung surgery

The diagram below shows the main structures within your chest. The right lung has 3 lobes of which the upper and lower contribute to 2/5ths and the middle is 1/5th. The left lung has 2 lobes that are of equal size.

Please note, this image does not accurately represent the size of each lobe.



Diagnosis of tumours

Thoracic surgeons do surgery for many reasons. Some of these operations can be for an already diagnosed or suspected cancer in the chest or lungs.

To enable normal growth and repair, our body cells reproduce in an orderly, controlled manner. Sometimes this process can become changed in some way; cells may reproduce faster and this can eventually form a tumour. These tumours can be non-cancerous (benign) or cancerous (malignant).

At present there are 3 main treatments for lung cancer; surgery, chemotherapy and radiotherapy. Your treatment may involve 1 or more of these options.

Different types of procedures

The common procedures carried out by thoracic surgeons at Leicester's Hospitals are listed below:

Bronchoscopy: most patients having lung surgery will have a bronchoscopy done when they are asleep before their main surgical procedure. This is where a tube-like camera is passed down your windpipe to look at the airways of your lungs. Sometimes when this is done samples are taken and sent to the laboratory for analysis.

Laser bronchoscopy (and stents, if needed): this procedure is similar to a bronchoscopy but a laser is used. If the airway is narrowed stents can sometimes be inserted. Stents are like scaffolding that help keep the airway open.

Surgical biopsy: a biopsy is a medical term for a "tissue" sample. We can take tissue samples of lung, the lining of the lung (pleura) or glands (lymph nodes). These samples can then be sent to the laboratory for analysis.

Cervical mediastinoscopy: a small cut is made in the bottom of your neck. A camera is inserted along the windpipe to examine and sample the lymph glands on the sides of the wind pipe and at the centre of your chest (mediastinum).

Anterior mediastinotomy: a small cut (incision) is made in front of the upper chest between the ribs along the breast bone (commonly on the left side) to examine and sample the lymph glands in the centre of the chest (mediastinum).

Video assisted thoracoscopic surgery VATS (keyhole surgery): this is where your surgeon uses a camera through 1 to 3 small incisions (3 to 5cm) into your chest to look at the lung. Cuts (incisions) are generally made under the arm and/ or just below the shoulder blade.

Thoracotomy: the name given to the cut (incision) that the surgeon makes around the side of your body, below your shoulder blade and between your ribs.

Median sternotomy: the name given to an incision made vertically down the chest over the breastbone, which allows access to both the left and right side of the chest.

Your surgeon will discuss with you the most appropriate type of cut that you will need for your operation.

Frozen section: this is where a piece of "tissue" is taken and sent to the laboratory for testing whilst you are asleep on the operating table. The result of this will decide if any more surgery is needed. Sometimes this can all be done during the same operation however, sometimes surgery may need to be done at a later date.

Lobectomy: this procedure involves removal of a lobe of the lung. The remaining lung will expand and fill the space left by the lung tissue that has been removed.

Bi-lobectomy: is the removal of 2 lobes of the lung on the right side.

Sleeve lobectomy: sometimes the surgeon may remove part of the main airway with the lobe and join the 2 ends to make sure all the cancer is removed.

Metastasectomy/ wedge resection / segmentectomy: each lobe of the lung is made up of several segments. 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 a small piece of lung tissue, rather than the whole lobe.

Pneumonectomy: this operation involves removing a whole lung. The remaining lung will then need to work a little bit harder but will soon become accustomed to the workload and you should be able to do most things you did before.

Extended pleurectomy/ decortication: this is a major operation involving the removal of the lining of the lung, the diaphragm, and the covering of the heart (pericardium) on 1 side of the chest. The diaphragm and pericardium are replaced using synthetic patches. After this procedure you may not be able to have anything to eat or drink for 2 or 3 days, but will be kept hydrated using an intravenous (IV) drip. Fluids and diet will be slowly introduced.

Thymectomy: the surgical removal of the thymus. The thymus gland is located in the upper chest under the breastbone. It is composed of many small lobes and is shaped somewhat like a butterfly wing over the windpipe.

Thyroidectomy: this is where the surgeons remove thyroid tissue that has grown down behind the sternum (breast bone).

Decortication: this procedure involves removing the lining that covers the lung itself and aims to free the lung that has become trapped by a long-standing infection, the development of scar tissue.

Pleurectomy: this procedure attempts to prevent the lung from collapsing by removing part of the lining covering the inside of the ribcage. This encourages the lung to stick to the ribcage.

Bullectomy: bullae are small blisters or weaknesses that appear on the surface of the lung. If they burst they can cause the lung to collapse. The surgeon can staple, stitch or remove these areas aiming to prevent the lung from collapsing.

Pleurodesis: this procedure attempts to stop air or fluid collecting in the space around the lung. A substance is inserted into this space that will cause inflammation and stick the lung to the inside of the ribcage.

Lung volume reduction surgery (LVRS): suitable for a small number of patients with emphysema. Lung volume reduction surgery removes the part of the lung that is not working well, so that the effort of breathing can focus on the part of the lung that works better.

This is normally done by keyhole surgery where 1 to 3 small cuts are made on the side of the chest. The surgeon removes the worst affected part of the lung using a special stapling device to cut and seal the lung tissue. Once the lung tissue has been removed, the lung is re-inflated by the use of a chest drain, which stays in place until air has stopped leaking from the staple line.

Endo bronchial valves or coils: these devices are an another option to LVRS for some patients with ephysema. These are put in under sedation or a general anaesthetic. A thin flexible tube (bronchoscope) is inserted by the patient's mouth into the wind pipe (trachea). Small coils or 1-way valves are passed through the tube and placed in the branches of windpipe (bronchus) supplying the diseased parts of the lungs.

The valves prevent air from entering the diseased parts of the lungs when breathing in, but allow air and mucus to exit when breathing out.

The coils are designed to contract and collapse parts of the lung.

Usually, several valves or coils are inserted in any 1 procedure. The aim of both procedures is to reduce the volume of lung tissue by collapsing these parts of the lung without removing them surgically.

Pectoplasty/ NUSS procedure: usually a cosmetic operation to correct chest deformities. The NUSS procedure involves the insertion of a bar beneath the breast bone to push it forwards. This procedure is often performed on younger patients.

Ravitch procedure: this procedure is also used to correct chest wall deformities. This is where the rib cartilages (strong and flexible connective tissue) are cut away on each side and the breastbone (sternum) is flattened so that it lies flat. One or more bars or struts may then be used to make sure the sternum keeps its shape.

This list does not include every operation that can be carried out by the thoracic surgeons. Please ask if you would like further information.

Thoracic surgery research

Some patients may be offered the opportunity to take part in clinical trials. A clinical trial is a research study designed to test new cancer treatments.

Patients who enter a clinical trial are among the first to receive new treatments before they become widely available. Because this research often leads to improved cancer treatments, clinical trials play a key role in the progress against cancer.

If you agree, you may be contacted by our thoracic research nurse.

Car parking

The main patient car park at the Glenfield Hospital uses automatic number plate recognition (ANPR). The south car park uses pay and display.

Blue badge holders: There is a limited number pf parking allocated for blue badge holders at the main entrance to the Glenfield hospital. If there is not a space, you can park for free in any public car park; please see below for details.

Blue badge holders (in ANPR car park): If, as a patient, you have a blue badge and have an appointment you can have free parking. To get free parking you need to do the following when you are ready to leave the hospital: The blue badge holder (who has to be the patient) must go to the car park office with their blue badge and appointment letter. If you show these you will get free parking for the length of the appointment

Blue badge holders (in pay and display car park): Display your blue badge when parking in any pay and display car park, and there will not be a charge

Up-to-date information is available on the hospital website www.leicestershospitals.nhs.uk or by calling the car park office 8am to 4pm Monday to Friday. Tel: 0116 258 3151.

Restaurant

The restaurant is for staff as well as for visitors and patients. All hot and cold food is prepared and made fresh on site daily.

- LEat Street Restaurant is open 8am to 2.30pm, Monday to Friday.
- LEat Street Cup Restaurant is open 9am to 5pm, Monday to Friday.
- LEat Cup (main entrance) is open 7am to 7pm, Monday to Friday and 8am to 6pm on weekends and bank holidays.
- LEat Street Cup (south entrance) is open 7am to 5pm, Monday to Friday.
- A 24 hour vending area is located next to LEat Street Restaurant.

Accommodation for relatives

There is no on site accommodation for relatives at the moment. However, there are a number of hotels locally if your relatives should wish to stay closer to the hospital.

Please contact the Thoracic Nurse Specialist on 0116 250 2552 should you like to know more about accommodation in the area.

Contact details

Thoracic Nurse Specialists: 0116 250 2552

Ward 26 – nursing staff: 0116 258 3666 or 0116 250 2484

Consultant Thoracic Surgeons (secretary contact numbers):

Mr A Nakas	0116 258 3223
Mr S Rathinam	0116 258 3959
Mr E Caurana	0116 258 3223
Mr P Papoulidis (locum)	0116 258 3959

Further information

- Your GP surgery or local pharmacy may also be able to help you.
- Help to stop smoking: NHS Smokefree 0300 123 1044 / www.nhs.uk/smokefree
- British Lung Foundation: 03000 030555 / www.blf.org.uk
- British Thoracic Society: www.brit-thoracic.org.uk
- Cancer Research UK: www.cancerresearchuk.org
- Macmillan Cancer Support: 0808 808 00 00 / www.macmillan.org.uk
- Mesothelioma UK: 0800 169 2409 / www.mesothelioma.uk.com
- Roy Castle Lung Cancer Foundation: 0800 358 7200 / www.roycastle.org
- Coping with Cancer in Leicestershire and Rutland: 0116 223 0055 / www.c-w-c.org.uk

This information is only a guide as to what to expect during and after your surgery.

Please contact the thoracic nurse specialists on 0116 250 2552 if you have any concerns or questions.

You can write down any queries you may have in the space below so that you do not forget them. You may also find it useful to write down some of the answers to your questions so that you can refer to them later when talking to your family or carers.

Keep this booklet in a safe place and bring it with you to hospital.

A space for you to make notes:

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔

على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference: RES038-1215

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

LEICESTER'S RESEARCH

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/patient-and-public-involvement