

## Patient information

# Adult elective surgery information pack

## Martin Corke Day Surgery Unit

01284 713050 or 01284 713959  
between 7.45am and 8.00pm

West Suffolk NHS Foundation Trust  
Hardwick Lane, Bury St Edmunds, Suffolk IP33 2QZ

Tel: 01284 713000

Website: [www.wsh.nhs.uk](http://www.wsh.nhs.uk)

Putting you first

# General information to prepare you for surgery

Please read the following instructions carefully before your operation.

***Failure to follow this advice could lead to the cancellation of your operation.***

Your operation will either take place in the main hospital or the Day Surgery Unit.

Nil by mouth instructions and surgery location will be sent to you by the admissions office when you are allocated a date for surgery. If you have any concerns about any of the instructions on your letter please phone the Martin Corke Day Surgery Unit between 7.45am and 8.00pm on 01284 713050 or 01284 713959.

Further information can be found on the Pre-Admission Unit link on the West Suffolk Hospital web page.

**It is your responsibility to ensure that you follow any instructions which were given to you in the Pre-Admission Unit about any medication changes prior to your operation.**

## Before your operation

- Do not smoke or use recreational drugs for 12 hours prior to your operation.
- Do not drink alcohol for 24 hours prior to your operation.
- Please bath or shower on the morning of your operation.
- Arrange for a responsible adult to drive and accompany you home.
- You cannot drive yourself or use public transport after a general anaesthetic. You may use a taxi but only if an escort travels with you.
- If you are having day surgery please arrange for a responsible adult to stay with you overnight after your operation.

## Please help us to help you

- Do not wear any nail varnish on your fingers or toes or any makeup.
- Do not bring any unnecessary money in with you.
- Do not wear any jewellery except a wedding ring. Body piercings should be removed.
- Please wear glasses rather than contact lenses.
- Please wear comfortable, supportive footwear.
- Do not use chewing gum.

## Remember to bring the following with you

- Any drugs or medicines in their original containers NOT a Dossett box.
- Any medical devices eg inhalers or CPAP machines you are using.
- Dressing gown and slippers.
- Something to read. Small change for newspapers etc.
- The telephone number of the person responsible for taking you home.

## Enquiries and car parking

- **Main hospital:** Visiting times vary according to ward. Please phone the main hospital on **(01284) 713000** and ask to be put through to the appropriate ward. Remember to bring change for car parking. Car park A at the front of the hospital is the designated patient/visitor parking area.
- **Day Surgery Unit:** In view of the short time that you will be in the Day Surgery Unit, visitors/partners are not permitted to stay with you. Enquiries can be made at the reception desk or by phoning **(01284) 713958**.

There is a 20 minute drop off bay outside Day Surgery. There are also some spaces for disabled parking.

## **Information for the first 24 - 48 hours after your anaesthetic**

- Rest for this period.
- Do not drive a car, motorbike or ride a bicycle.
- Do not use power tools or household appliances, which may cause harm or injury.
- Do not make any vital decisions or sign legal documents.
- Do not stand up quickly as it is not uncommon to become light headed after an anaesthetic.
- Do not smoke, drink alcohol or take recreational drugs.
- Do not take sleeping tablets.
- Please follow any special instructions which the surgeon or anaesthetist have given you.

## **Diet advice**

- You may feel sick or vomit after a general anaesthetic. This is not uncommon. If it does occur, remain quiet, lie down and sip plain water until it passes.
- Otherwise eat and drink normally - unless instructed differently.

## **What will happen on the day?**

- When you arrive on the ward / Day Surgery Unit you will be booked in at their reception area.
- The Nursing staff will help prepare you for your operation.
- You will meet the surgeon and anaesthetist prior to having your operation.
- You will be asked to sign a consent form.

**You will find that you are asked the same questions more than once; this is all part of the careful checking system.**

- The hospital has several theatres. People are collected from the ward dependant on the type of operation they are having and which theatre list they are allocated to.
- Please be advised you will have to wait until it is your turn for theatre.

**Further information about your operation can be found on the West Suffolk Hospital website [www.wsh.nhs.uk](http://www.wsh.nhs.uk) and click on “patient leaflets”.**

# Surgical pre-admission MRSA screening

## What is MRSA?

MRSA (Meticillin Resistant *staphylococcus aureus*) is a type of bacteria, which can be found on the skin and in the nose of healthy people causing them no harm whatsoever.

When someone who is carrying MRSA has an operation or invasive procedure there is an increased risk of transferring the bacteria elsewhere in the body and causing an infection which can have serious consequences.

Identifying if you are carrying MRSA and providing treatment to get rid of the bacteria will reduce the risk of this occurring therefore a swab will be taken from your nose and groin areas at preadmission clinic.

It is also important to know if someone is carrying MRSA so that in the hospital, steps can be taken to prevent it being spread to other patients.

Patients who have wounds or are recovering from illnesses are more vulnerable to developing an infection.

If your swab result is positive a nurse from the Pre-admission Unit will contact you.

You will be asked to attend the Pre-admission Unit to collect a prescription for treatment to commence prior to your surgery.

## What is the treatment for MRSA?

Treatment for MRSA is a 5-day course of anti-septic washes, nasal ointment and dusting powder.

- Patients who are coming into the hospital for a surgical procedure will be required to complete a 5-day course of treatment and attend the Pre-admission Unit for post MRSA screening swabs on days 7, 9 and 11 after the treatment.
- Patients attending the Day Surgery Unit will be required to complete their 5-day course of treatment 5 days prior to their procedure date, day 5 being the last day.
- Patients attending for an orthopaedic procedure at the Day Surgery Unit will be required to complete a 5-day course of treatment and attend the Pre-admission Unit for post MRSA screening swabs on days 7, 9 and 11 after the treatment.

The Pre-admission Unit nurse will advise you when to start the treatment and if you require post MRSA screening swabs.

There maybe a few patients who on completion of their treatment will need a further course.

### **Will my operation / procedure be delayed?**

The Pre-admission Unit nurse will inform you if your procedure needs to be delayed to allow sufficient time to complete your treatment.

Some patients will be prescribed an antibiotic at the time of the operation to reduce the risk of infection.

### **Are my family and friends at risk?**

No. Healthy people are not at risk from MRSA. We do however encourage that all visitors wash their hands both before and after visiting.

### **When do I start my treatment?**

You may find it helpful to write down the date your treatment started, and any follow up swab dates in the table below:

<b>Date to commence 1<sup>st</sup> treatment</b>	
Date 1 <sup>st</sup> swab	
Date 2 <sup>nd</sup> swab	
Date 3 <sup>rd</sup> swab	

<b>Date to commence 2<sup>nd</sup> treatment</b>	
Date 1 <sup>st</sup> swab	
Date 2 <sup>nd</sup> swab	
Date 3 <sup>rd</sup> swab	

The doctors and nurses looking after you can give you any further information that you require or will contact the Infection Prevention Team if requested.

# Having a general anaesthetic

This leaflet explains what you can expect when you are having a general anaesthetic for a planned operation.

## Types of anaesthetics

A general anaesthetic is a state of controlled unconsciousness, so you are asleep, pain free and unaware of the surroundings for the duration of the surgery.

For surgery on the lower body it is possible to have a spinal anaesthetic with or without sedation instead of a general anaesthetic.

For arm surgery, a nerve block (plexus block) with or without sedation may be an option instead of a general anaesthetic.

For procedures on the body, a nerve block might be used (paravertebral block) in addition to a general anaesthetic.

Local anaesthetic infiltration of the wound is often used to reduce wound pain. It may numb the area for 6 - 8 hours after the operation.

You may receive a general anaesthetic only or a combination of the above, depending on your type of surgery.

## How you can contribute to a quick recovery is important

- If you smoke, stop before the operation. This helps with wound healing and reduces the risk of chest infections after the operation.
- If you are overweight, try and lose weight before surgery to improve wound healing and reduce the risk of chest infections.
- If you have health problems such as diabetes, high blood pressure, heart disease, lung disease or kidney disease, it is sensible to try and improve the control of your condition with the help of your GP. This will reduce the risk of complications around the time of surgery such as poor wound healing, chest infections, strokes, heart attacks and poor kidney function after the operation.
- If you have any dental infections or loose teeth, see your dentist before surgery. Poor dental health increases the risk of damage to your teeth and might be a source of infection.



- Please bring both a list of all your medication and the medication itself for both the pre-assessment visit and the admission for surgery, in order to be able to continue your usual medication throughout the period.
- If you use any herbal remedies, stop them 7 days before surgery. They can interact with the anaesthetic drugs and painkillers so that you are slow to wake up or they may make you bleed more.
- If you get any flare ups in chronic conditions like asthma the week before surgery please call the Pre-admission Unit for advice: **telephone 01284 712810.**

## On the day of surgery

- If you get any flare ups in chronic conditions like asthma the week before surgery please call the Pre-admission Unit for advice: **telephone 01284 712810.**
- If you feel unwell on day of surgery please call the ward for advice.
- Stop eating 6 hours before surgery. This includes all dairy products (including milk), chewing gum and sucking sweets.
- Drink water only until 2 hours before surgery.
- The last 2 hours before surgery you are allowed sips of water.
- There are strict rules about eating and drinking before an anaesthetic for your safety, because when you are anaesthetised, stomach contents can be regurgitated into your lungs and cause a very serious chest infection.
- Take your usual tablets with a glass of water and continue using inhalers as normal.
- Only omit medication that you have specifically been asked to stop by the Pre-admission Unit.
- Your anaesthetist may choose to give you a pre-med to make you relax however pre-meds are generally used less often now, as they tend to last longer than the anaesthetic itself.
- You will meet your anaesthetist before the operation and they will take you through your anaesthetic plan. Do not hesitate to ask questions about your anaesthetic.
- You will need to sign a consent form after been given surgical information about the procedure. This includes the possibility of receiving blood transfusions in connection with your surgery. For procedures with significant blood loss there

is the possibility to use a cell saver to give you back your own red blood cells. Blood is sucked from the wound, washed with saline and re-infused via your drip.

- You will also be asked to decide if you want to be resuscitated in the event of a cardiac arrest.

## **Before going to theatre**

- You will need to change into a hospital gown, the ward nurse will help you.
- You need to put elasticated stockings on your legs to help prevent blood clots.
- Jewellery needs to be removed and locked away with other valuables; this also includes any tongue studs.
- Please remove any nail varnish and other make-up before going to theatre to help with observing your normal skin colour during surgery.
- Please keep your glasses, hearing aids and dentures in. We will remove them in the anaesthetic room if required and return them when you are in the recovery unit.
- You will be taken to theatre on a bed or trolley by a porter after the ward staff have checked your identity and site and side of the operation. This information will be rechecked in the anaesthetic room before you are anaesthetised.

## **The general anaesthetic**

The anaesthetic can be started either via a cannula in the back of a hand or by breathing anaesthetic gases via a facemask over your nose and mouth. This will be maintained either by anaesthetic gases via the lungs or drugs via a drip until surgery is finished.

When the anaesthetic is stopped at the end of the surgery you will regain consciousness.

You should expect to be completely unaware of anything in the anaesthetic room or theatre once you have gone to sleep until you wake up at the end of the procedure.

You will wake up either in theatre or in the recovery room depending on the type of surgery.

## Recovery

After surgery you will be observed in recovery for a period of time to check that your heart rate, blood pressure and breathing are satisfactory.

You will receive oxygen until you are properly awake.

Any sickness and queasiness will be treated.

Any pain and discomfort will be managed.

Any blood loss will be treated.

When all observations are stable and your general condition is satisfactory you will go back to your ward.

If you have undergone major surgery you may need to stay overnight in recovery or go to the high dependency ward for a day or two before going back to the ward.

**Your recovery will be quicker if you eat, drink and get out of bed and back on your feet as soon as possible.**

## Complications / side effects

### Common side effects (1 in 10 patients)

- Queasiness and sickness after surgery: we give medication for this, however you may still experience it
- Sore throat: this will likely disappear in 1 - 2 days
- Blurred vision and dizziness due to the anaesthetic drugs: this should disappear in 24 – 48 hours
- Headache: this may be due to a lack of food and water before surgery
- Itching: this may be due to the strong pain killers you require
- Confusion: this can especially be seen in older patients and may last 1 – 2 days. This can be upsetting for both yourself and your relatives.
- Backache or other aches and pains: these are often due to positioning on the theatre table

## **Uncommon complications (1:1000 or less patients)**

- Awareness: recall of conversation or events from theatre after you were sent off to sleep and before you were woken up at the end of surgery. You should report it to the ward staff so they can notify the anaesthetic department as we will need to discuss it with you.

Post-operative chest infections, especially if you already have chest problems

- Trouble emptying your bladder, seen in older patients and/or if you have bladder problems already
- Muscle pains after a specific muscle relaxant is used if you have a hiatus hernia or heart burn
- Damage to your teeth: caps and crowns are more vulnerable than natural teeth
- Soft tissue damage to lips and tongue can occur due to airway handling
- Flare up of any pre-existing medical illness; this might prolong your stay

## **Rare complications (1:100,000 or less patients)**

- Permanent damage to eyes
- Serious allergic reactions to any of the drugs given
- Permanent nerve or brain damage
- Death

It must be stressed that anaesthesia generally is very safe today, however, there is always a risk when undergoing anaesthesia and surgical procedures.

Brain damage and death during an anaesthetic are rare events today and mostly occur in very sick patients and during emergency surgery.

More information can be found on: [www.rcoa.ac.uk](http://www.rcoa.ac.uk) under “Anaesthesia explained.”

# Risks associated with your anaesthetic

## Serious allergy during an anaesthetic (anaphylaxis)

This leaflet explains what anaphylaxis is and why a rare allergic reaction might occur during your operation. Before, during and after your operation you will receive different medicines through drips, by mouth or other routes. It is possible to have a serious reaction to one of these, or to a combination of several different drugs and chemicals. This leaflet gives information about these reactions and how these can be treated. It also describes what testing you can have afterwards to find the cause.

## What is anaphylaxis?

Anaphylaxis is a severe allergic reaction that occurs very rapidly, with massive release of chemical substances by the body. During the reaction these chemicals can result in breathing difficulty, wheezing, low blood pressure, swelling, and skin problems including urticaria (hives) and red rashes. Severe anaphylaxis is life threatening but, when this is recognised and treated quickly, death is very rare.

What can cause anaphylaxis during an anaesthetic?

Anaphylaxis is often caused by an allergy to a specific drug; this is called allergic anaphylaxis. The two most common causes of allergic anaphylaxis during anaesthesia are:

- drugs used to prevent movement during surgery (called muscle relaxants or neuromuscular blocking agents). These drugs are only given to patients who are already anaesthetised.
- antibiotics – these are often needed during surgery to prevent infections.

Latex used to be a common cause of anaphylaxis during surgery. This is less so now as few latex containing products are used in hospitals.

Anaphylaxis can also be caused by a combination of drugs or substances working together to cause a reaction. During a general anaesthetic this includes anaesthetic drugs, stress on the body from surgery itself and infections. Anaphylaxis is more common in women, although it is not understood why.

If you have a serious anaphylactic reaction, in order to understand the cause, specialist testing is performed a few weeks after a reaction. Skin testing means

putting a tiny drop of the drug on your skin and pricking the skin lightly with a small piece of plastic shaped like a toothpick. This is not painful and it is left for a few minutes to see if you develop an itchy lump on the skin. If this happens it means that you are allergic to that drug. Sometimes you might need to have an additional test where the injection goes a little bit deeper, and this will sting for a short time. Skin testing has to be carried out by someone who has been trained in diagnosing allergy.

If the cause of anaphylaxis is found to be an allergy to a specific drug, it is vital that you avoid this drug in the future to prevent further severe reactions.

## **How is anaphylaxis treated?**

- Adrenaline is the best drug treatment and is given as injections.
- You will usually be given oxygen and have an intravenous drip.
- Antihistamines, steroids and asthma treatments might be prescribed if you need them.

Usually the symptoms will settle down quite quickly, but it is important to keep a close watch so you might need to stay in hospital overnight. Very serious reactions will require treatment in a Critical Care Unit (CCU). If the operation has not already started, surgery may be postponed unless it is very urgent.

All anaesthetists are trained to treat anaphylaxis and adrenaline (the drug used to treat severe allergic reactions) is immediately available in every operating theatre.

Your anaesthetist will take blood tests at the time of the reaction and then refer you for specialist investigation. In the UK every serious reaction is also reported to the Medicines and Healthcare products Regulatory Agency (MHRA) (<http://bit.ly/2kQARLe>); your anaesthetist will do this.

## **How frequently do anaesthetics cause anaphylaxis?**

Estimates of life-threatening anaphylaxis around the world varies from 1 in 2,500 to 1 in 20,000 anaesthetics. (1, 2)

Most people make a full recovery from anaphylaxis. We do not know how many anaphylactic reactions during anaesthesia have led to death or permanent disability.

## **Is allergy to anaesthetics hereditary?**

No. If you are allergic to an anaesthetic drug, your children are no more likely to have the same allergy than any other person.

Some very rare non-allergic problems with anaesthetic drugs can occur in families, for example 'suxamethonium apnoea' where some muscle relaxant drugs can last longer than usual, and 'malignant hyperthermia' where the body can become very hot. These are NOT allergies.

## **Is there anything I can do to help avoid serious allergy?**

You may already know that you are allergic to certain medicines or substances. When you come into hospital, you will be asked several times if you are allergic to anything. It is very important that you tell the nurse and anaesthetist looking after you if you have an allergy. If so, this will be recorded so that everyone can check what you are allergic to before you are given medicines or have an operation. If your allergy is serious, you may be advised to wear a 'Hazard Warning' bracelet after you leave hospital.

## **Can I be tested for anaphylaxis before I have my anaesthetic?**

Routine skin testing prior to surgery to see if you are allergic to anaesthetic drugs is not useful. It is only recommended for those people who have had a serious allergic reaction during an anaesthetic in the past (3). The reason for this is that skin testing is not completely reliable. A negative test doesn't guarantee that you can safely have the drug, and a positive test does not mean you would definitely have a reaction if you took the drug in the future. The health professionals can only make sense of a skin test after a reaction has already happened, as a guide to which drug may have caused the reaction.

If you have any symptoms of latex allergy, for example itching or a rash after exposure to latex rubber in children's balloons, rubber gloves or condoms, then you should be tested for a latex allergy before your surgical operation. There are two types of test: a skin test and a blood test. Which of the tests you have will depend on how your local clinic chooses to do the testing. If you believe you may be allergic to latex you should tell your GP well in advance of going into hospital for surgery.

## **If I am allergic to an anaesthetic drug, are alternative drugs available?**

Yes, there are many different anaesthetic drugs and alternative drugs can almost always be given. If you are allergic to an antibiotic or a skin antiseptic, you will be given a suitable alternative.

## **What should I do if I think I have had an allergic reaction during an operation in the past?**

If you think you might have had an allergic reaction during or after previous surgery, it is important to try to find out what happened and what might have caused it. It may be possible for your GP to find out what the cause of the problem was from your hospital consultant. Your GP may then refer you to an allergy clinic to help to find the cause.

## **Where can I get more information about anaphylaxis?**

- Your GP or your anaesthetist
- 'Suspected anaphylactic reactions associated with anaesthesia', published by the Association of Anaesthetists of Great Britain and Ireland and the British Society of Allergy and Clinical Immunology.(4)
- Allergy UK ([www.allergyuk.org](http://www.allergyuk.org)).

## **Further information**

Anaesthetists are doctors with specialist training who:

- discuss the type or types of anaesthetic that are suitable for your operation. If there are choices available, your anaesthetist will help you choose what is best for you
- discuss the risks of anaesthesia with you
- agree a plan with you for your anaesthetic and pain control
- are responsible for giving your anaesthetic and for your wellbeing and safety throughout your surgery
- manage any blood transfusions you may need
- plan your care, if needed, in the intensive care unit
- make your experience as calm and pain free as possible.



## Common terms

**General anaesthesia:** This is a state of controlled unconsciousness during which you feel nothing and may be described as ‘anaesthetised’.

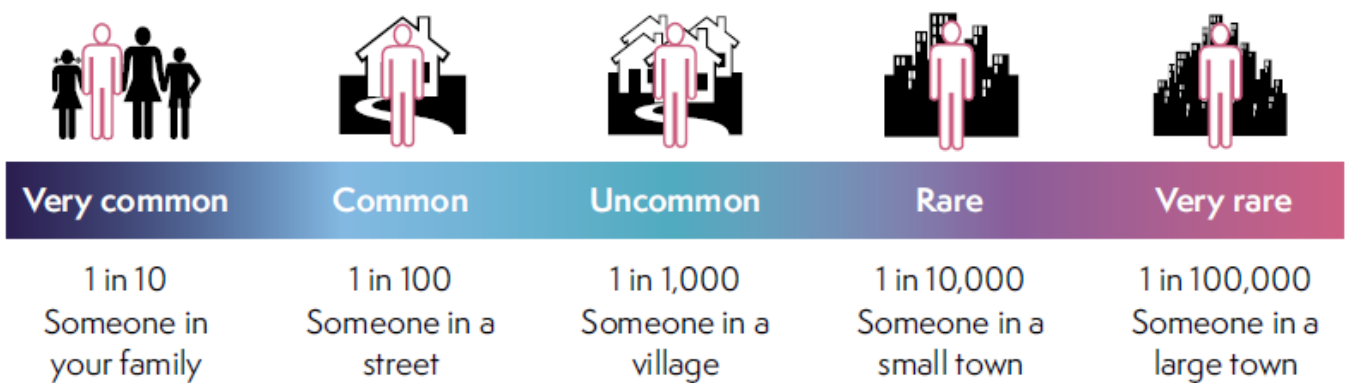
**Regional anaesthesia:** This involves an injection of local anaesthetic which makes part of your body numb. You stay conscious or maybe sedated, but free from pain in that part of your body. You can find out more about general and regional anaesthesia in the patient information booklet ‘Anaesthesia Explained’, which is available from the RCoA website via: [www.rcoa.ac.uk/document-store/anaesthesia-explained](http://www.rcoa.ac.uk/document-store/anaesthesia-explained)

## Risks and probability

In modern anaesthesia, serious problems are uncommon. Risk cannot be removed completely, but modern drugs, equipment and training have made anaesthesia a much safer procedure in recent years.

The way you feel about a risk is very personal to you, and depends on your personality, your own experiences and often your family and cultural background. You may be a ‘risk taker’, a ‘risk avoider’, or somewhere in between. You may know someone who has had a risk happen to them, even though that is very unusual. Or you may have read in the newspapers about a risk and be especially worried about it.

People vary in how they interpret words and numbers. This scale is provided to help.



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Your anaesthetist will give you more information about any of the risks and the precautions taken to avoid them. You can find more information leaflets on the College website [www.rcoa.ac.uk/patientinfo](http://www.rcoa.ac.uk/patientinfo).

# Common events and risks in anaesthesia

This summary card shows the common events and risks that healthy adult patients of normal weight face when having a general anaesthetic for routine surgery (specialist surgeries may carry different risks).

Modern anaesthetics are very safe. There are some common side effects from the anaesthetic drugs or equipment used which are usually not serious or long lasting. Risk will vary between individuals and will depend on the procedure and anaesthetic technique used. Your anaesthetist will discuss with you the risks that they believe to be more significant for you.

There are other less common risks that your anaesthetist will not normally discuss routinely unless they believe you are at higher risk. These have not been shown on this card.



**VERY COMMON – MORE THAN 1 IN 10**  
Equivalent to someone in your family



Sickness



Shivering



Thirst\*



Sore throat



Bruising



Temporary memory loss  
(mainly in over 60s)



**COMMON – BETWEEN 1 IN 10 AND 1 IN 100**  
Equivalent to someone in a street



Pain at the injection site\*



Minor lip or tongue injury



**UNCOMMON – BETWEEN 1 IN 100 AND 1 IN 1,000**  
Equivalent to someone in a village



Minor nerve injury



**RARE – BETWEEN 1 IN 1,000 AND 1 IN 10,000**  
Equivalent to someone in a small town



**1 in 1,000**  
Peripheral nerve damage that is permanent



**1 in 2,800**  
Corneal abrasion  
(scratch on eye)



**1 in 4,500**  
Damage to teeth requiring treatment



**1 in 10,000**  
Anaphylaxis  
(severe allergic reaction to a drug)



**VERY RARE – 1 IN 10,000 TO 1 IN 100,000 OR MORE**  
Equivalent to someone in a large town

The risks we all take in normal life, such as road travel, are actually far higher than the risks below.



**1 in 20,000**

Awareness during an anaesthetic



**1 in 100,000**

Loss of vision



**1 in 100,000**

Death as a direct result of anaesthesia

More information on these risks and on how to prepare for surgery can be found here [bit.ly/RCoA-Risk](http://bit.ly/RCoA-Risk)

\*The first Sprint National Anaesthesia Project (SNAP-1) Study. *Br J Anaesth* 2016 ([bit.ly/SNAP1-2014](http://bit.ly/SNAP1-2014)).

**RCoA**  
Royal College of Anaesthetists

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# Deep vein thrombosis (DVT) and pulmonary embolism (PE) advice for surgical patients

## What is a deep vein thrombosis (DVT)?

A DVT is a blood clot that forms within a vein deep in the leg but can occur elsewhere. This blocks the normal flow of blood through the leg veins either partially or completely and so causes leg swelling and tenderness. If a clot breaks off it travels to the lung and causes a pulmonary embolus (PE) which can be serious and occasionally fatal.

## What is a pulmonary embolism (PE)?

A pulmonary embolism is caused by a blood clot from the leg passing up the vein to the lung and blocking a blood vessel in the lung. This can have serious and acute effects. It can occur without any symptoms or signs of a DVT.

## Why does a blood clot form in leg veins?

Three factors may trigger a clot to form in a vein:

1. A reduced blood flow allows the blood to clot in the vein (e.g. immobility, surgery or long-distance travel over 3 hours)
2. Changes to the clotting mechanism which may be inherited, caused by some drugs or conditions such as pregnancy.
3. Damage to the lining of the vein allows the blood to clot (e.g. trauma, surgery or inflammation)

## Is DVT a serious condition?

A DVT in itself is not a serious condition if the clot remains stuck to the vein wall however it can give you two problems:

1. **Pulmonary embolism:** The blood clot can dislodge from the vein wall and travel to the lung causing a pulmonary embolism (PE). This can be a serious problem depending on the size of the clot. It can present with shortness of breath, rapid heartbeat, chest pain and if severe, coughing up blood or collapse.

PE is not common but can be life threatening and requires urgent medical attention.

- 2. Post-thrombotic syndrome:** DVT can cause inflammation and permanent obstruction in the deep vein system of the leg. This complication can produce pain, swelling, discolouration and ulceration in the lower leg. This is called post-thrombotic syndrome which is a long-term problem.

## Who is most at risk?

There are several factors which increase your chance of developing a DVT/PE. And these include:

- Previous DVT or pulmonary embolism (PE)
- Major surgery, particularly orthopaedic operations such as joint replacement
- Major trauma / lower limb injury
- Paralysis or immobility of lower limbs including prolonged bed rest
- Family history of DVT or PE
- Faulty blood clotting which is usually an inherited tendency to blood clots, i.e. thrombophilia
- Active cancer and cancer chemotherapy
- Recent medical illness (eg heart or lung disease, kidney disease / failure, recent heart attack, inflammation such as inflammatory bowel disease)
- Smoking
- Obesity e.g. Body Mass Index (BMI) over 30
- Pregnancy and recent delivery
- Age over 60 years
- The contraceptive pill or HRT which contain oestrogen or a 3<sup>rd</sup> generation progesterone

The overall risk of a thrombosis being present after surgery ranges from 10% – 40%, depending on the type of surgery with orthopaedic surgery carrying the highest risk. However, only 1% of orthopaedic cases and 0.5% of general surgical cases, present with a full-blown thrombosis as small undetected clots dissolve on their own.

## Is travelling a risk?

If you travel for more than three hours at one time in the four-week period before or after surgery, your risk for DVT is higher because of the immobility of your legs.

After major joint replacement surgery, the risk is present for up to 90 days and particularly for long haul flights over 4 hours.

## **How will DVT / PE be prevented when I am in hospital?**

**Not all DVTs can be prevented but the risks can be significantly reduced. You will be assessed to see what preventative treatment you will need depending on your risk factors.**

### **Treatments include:**

- Compression stockings for most patients
- A low dose of a blood thinning medicine (heparin, given as a small injection or tablet once a day and prescribed after discharge)
- Early mobilisation after surgery
- Bed exercises to keep the blood flow going in your legs
- Maintaining good fluid intake

## **How effective is the preventative treatment?**

Compression stockings reduce the risk of deep vein thrombosis and of pulmonary embolism and so are used on all surgical patients except those who have poor circulation in their legs.

The use of a blood thinning agent such as a low molecular weight heparin (LMWH) injection reduces the thrombosis risk by up to 50% and risk of pulmonary embolus by up to 65%. It is used for most orthopaedic patients and some other patient groups according to the type of surgery. In some patients it will be advised that the LMWH injection is continued on discharge from hospital for up to 4 weeks after surgery.

## **What can I do at home?**

After you are discharged you should continue to be as mobile as possible, as this speeds up the blood flow in the calf veins and helps prevent a thrombosis.

If you have been asked to use the compression stockings make sure they are put on evenly and without wrinkles.

Stop smoking, drink plenty of water.

If you do not take the precautions that have been mentioned to you then your risk of thrombosis and its complications will be higher.

## **What are the symptoms of DVT?**

Typical symptoms in the leg include swelling associated with pain, calf tenderness and occasionally heat and redness compared to the other leg.

There may be no leg symptoms and the DVT is only diagnosed if a complication occurs in the form of a PE.

There are other causes of a painful and swollen calf especially after injury or surgery so you need to ask your GP to assess you and he may ask you to be seen urgently at the hospital if he suspects a DVT.

## **If I get a DVT can it be treated?**

DVT is a treatable condition. The aim of treatment is to prevent the clot spreading up the vein and allow it to slowly dissolve and also to prevent the serious complication of PE.

Once a DVT has been diagnosed you will be given injections initially followed by anticoagulation tablet treatment (warfarin) to thin the blood.

You will then be referred to the anticoagulation service for regular checks and follow up. You will be advised to stop taking warfarin after a few months if the DVT is a one-off event.

If you have had more than one DVT you may be advised to continue warfarin for the rest of your life with regular monitoring.

# Managing pain and sickness after day surgery

As your anaesthetic wears off you may find that you experience some pain. Pain can stop you from doing the things you would normally do and disturb your sleep. This can lengthen the time it takes for your body to recover from the operation, so it is important that your pain is controlled. You should be able to breathe deeply, cough and move around normally. It is not always possible to remove your pain totally, but you should be comfortable.

While you are at the Day Surgery Unit (DSU) your pain will be assessed at regular intervals using a pain score and pain killers will be given accordingly.

## Managing pain at home

Effective pain relief is achieved by taking your painkillers regularly. Do not leave taking your painkillers until your pain is bad.

Take your painkillers to match the severity of pain you are experiencing. It may be useful to take painkillers 30 minutes before physiotherapy or doing more activity. Allow 20 - 30 minutes for the painkillers to work.

## Medication you may be given by DSU

Paracetamol is the basis of post-operative pain management and should be taken regularly. Other painkillers may be added if required.

**Paracetamol:** It is a good painkiller for mild to moderate pain and should be taken regularly every 6 hours. It also helps to increase the effect of other painkilling medication. Never exceed the dose and never take paracetamol with other paracetamol-containing painkillers eg co-codamol.

**Ibuprofen:** This is a very effective anti-inflammatory drug and can be taken every 6 - 8 hours. It is not suitable for everyone. If you are unsure about taking Ibuprofen ask your doctor, a pharmacist or read the product information leaflet.

## Compound pain killers eg co-dydramol; co-codamol

These drugs contain paracetamol and an opioid. As the pain diminishes, stop taking these drugs and then ONLY take paracetamol, until the pain has gone.

Never take paracetamol and paracetamol containing compound painkillers within 6 hours of each other.

## Opioid painkillers

These are strong pain killers and include codeine, morphine and other morphine-like preparations. These are normally prescribed for moderate to severe types of pain.

Opioid painkillers are safe to be taken with paracetamol and ibuprofen if your pain is moderate to severe.

**Codeine** can make some people feel dizzy and sick. If you feel you are not getting any pain relief from taking codeine, you may be one of the small numbers of people for whom codeine does not work well. Please see your GP for an alternative.

**Morphine oral solution (Oramorph®):** This is a strong opioid painkiller and may be part of your discharge medication only if you were given it during your stay.

Draw up the prescribed volume of morphine in the dedicated syringe and slowly press the plunger with the syringe tip in your mouth. You should not require morphine more than once every 4 hours.

Once your pain has resolved, any remaining unused strong opioids should be returned to your usual community pharmacy or dispensing practice for safe disposal.

## How to take your painkillers

Paracetamol	6 hourly
Ibuprofen	6 - 8 hourly
Codeine	6 hourly
<b>or</b>	
Morphine	4 hourly

The medicines are most effective when given at staggered times throughout the day, so that as one wears off the other is working. If you feel this is not controlling your pain, see your GP.



## Time of last drugs given on Day Surgery Unit

Paracetamol

Ibuprofen

Codeine or Morphine

**Use the chart below to help you keep a record of the drugs you have taken**

Day	Pain score	What tablets did I take?
Operation		
Day 1		
Day 2		
Day 3		
Day 4		

If you need any help or information please contact the Martin Corke Day Surgery Unit between 7.45am and 8.00pm on 01284 713050 or 01284 713959.

### WARNING

- **Do not** exceed the daily dose of your painkillers
- **Do not** take alcohol while taking painkillers
- **Driving: *Please be aware that opioid drugs may impair your driving ability***  
You may be liable to prosecution if your driving is impaired whilst you take these drugs. Further information can be found at [www.britishpainsociety.org](http://www.britishpainsociety.org).

### Other information

- **Constipation:** Painkillers can cause constipation. If you develop constipation you can buy simple laxatives at any chemist.
- **Food:** It is advisable to always take ibuprofen with food as it can irritate your stomach.
- **Rest:** It is normal when recovering from surgery to feel tired and it is important

to rest when you get home. Gradually increase your activity over a few days and be aware of how you are feeling before increasing your daily activities. Using pillows or cushions to support you can make you more comfortable.

- **Heat:** A hot water bottle, a heated towel or a heat pad can help relieve pain, but you must be careful not to overheat the skin as this can cause bleeding.
- **Cold:** A cold flannel or a bag of frozen peas wrapped in a towel may help to reduce swelling.
- **Massage:** A gentle massage around the affected area may also help, but be careful not to rub too hard over the wound as it can affect healing.
- **Distraction therapy:** Tension makes pain feel worse, so anything that will help you relax and take your mind off the pain will help.
- **Complementary therapies:** If you have previous experience of using complementary therapies such as self-hypnosis, acupuncture, aromatherapy, reflexology or a TENS machine, inform your complementary therapy practitioner who may be able to help you prepare for your operation.

# Stopping pain killers – pre-operative advice

Post-operative discomfort is a part of the healing process. The aim of post-operative pain control is to promote mobilisation and function and **not** the absence of pain.

Generally, treatment only needs to be given for a short period whilst healing commences.

All painkillers have side effects and may include sickness, kidney failure, hallucinations, addiction and constipation.

Prolonged use of opioid pain medication is now known to cause addiction, tolerance and hyperalgesia. Hyperalgesia is the condition whereby the medicines actually cause the pain to become worse.

Following your discharge from hospital, we recommend you stop all opioid medication within 5 to 7 days and then stop anti-inflammatories and paracetamol once able.

If you have problems with reducing and stopping pain medication, you should speak with your GP for further advice and support.

If you were taking pain medication (either immediate or a slow release preparation), before coming in for your procedure, you need to talk to your GP about reviewing this medication.



**STEP ONE  
STOP  
OPIOID  
PAIN  
MEDICATION**

We recommend that opioid pain killers such as Oramorph, Codeine and Oxycodone are stopped as soon as movement allows. This is usually within 5 days of hospital discharge.

*Prolonged use of opioid pain killers may cause problems, including: constipation, weight gain, lack of sex drive, worsening pain, addiction and death due to unintentional overdose.*

<p><b>STEP TWO STOP IBUPROFEN</b></p>	<p><i>Long term use of Ibuprofen can cause kidney failure and increase the risk of stomach ulcers.</i></p>
<p><b>STEP THREE STOP PARACETAMOL</b></p>	<p>The last pain medication you should stop is paracetamol.</p> <p><i>Long term use of paracetamol is associated with an increased risk of a heart attack, bleeding in the stomach and kidney failure.</i></p>

## Important safety messages

- **Store all medicines safely**

Make sure they cannot be seen or reached by children or vulnerable adults. Please check the pharmacy label for storage instructions such as 'store in the fridge'.

- **Never share your medicines**

Your medicines have been prescribed only for you to take - nobody else.

- **Disposal of medicines no longer required**

Unused medicines must be immediately disposed of safely. Safe disposal can be ensured by returning unwanted medicines to your community pharmacy or the dispensary if your GP is a dispensing practice.

- **Use the medicine as directed on the label**

Before you leave hospital make sure you understand exactly how and when to take your medicines, and you know how to dispose of your unused opioids.

*Further guidance can be found in the WSH Pharmacy department's "Information about your medications" leaflet.*

## Signs and symptoms of overdose

Taking too much opioid pain medicine whether intentional or not is called an overdose. This can be very serious and may cause death.

Some of the signs that someone is experiencing an overdose includes:

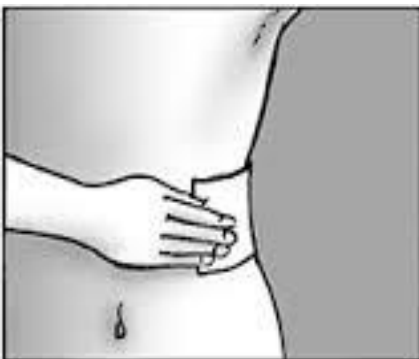
- Confusion or hallucinations
- Unresponsive or unconscious
- Difficulty breathing or no breathing
- Slurred speech
- Very small pupils in the eyes
- Lips or fingernails are blue or purple
- Poor coordination of balance

Your family, friends and carers should know these signs so they can take immediate action.

**If you think that you or someone else has taken too much of their opioid medicine dial 999 immediately**

During your admission to hospital you may have been prescribed other types of pain medication.

### Local anaesthetic patches (eg lidocaine plasters)



If local anaesthetic patches are beneficial, continue using them until your supply is used up. Your GP will not be allowed to re-prescribe these patches without discussion with the pain clinic.

## Antineuropathic medication



If medication for 'nerve pain' (eg Pregabalin or Gabapentin) was prescribed, you will need to see your GP to discuss reduction and discontinuation of these drugs.

## Opioid pain medication and driving

Please be aware that opioid pain medicines may impair your driving ability and you may be liable for prosecution by the police if you have levels of these drugs in your blood above specified limits.

***You are therefore advised not to drive whilst taking opioid pain medication.***

Further information regarding opioid pain medicines and driving can be found on the website:

**[www.gov.uk/drug-driving-law](http://www.gov.uk/drug-driving-law)**

# Adult general post-operative guidance

## General guidance after your operation

**Driving:** Do not drive a car or other motor vehicle or ride a bike for 24 - 48hrs. After that you are only safe to drive when you can safely perform an emergency stop comfortably.

The operation site needs to be kept clean and dry for 48 hours. After this you may remove your dressing and have a bath or shower. You may prefer to keep the wound covered with a clean, dry dressing until the stitches are removed or the wound is healed.

**Steristrips:** Try to leave these on for one week as they help to support the wound while it is healing. You can have a quick bath or shower with them on but do not soak them. If they lift at the edges, you can trim them with a pair of scissors.

**Stitches:** If you have stitches that need to be removed you will be given instructions about where and when this should happen.

**Skin glue:** This is a clear adhesive that joins the edges of the wound. It will fall off in 5 - 10 days. Do not pick, rub or scratch the glue as it will fall off before the wound is healed. Avoid direct sunlight to the wound and do not apply skin creams or use tanning beds or lamps while the glue is in place. Some patients experience mild itching or redness to the area around the glue.

**Pain:** You may experience some mild to moderate pain. Your own supply of paracetamol or ibuprofen should be sufficient. It is better to take your pain killers regularly for a few days to ensure you are comfortable rather than waiting until you are in pain before taking them. As healing occurs you should feel less pain. If your pain remains severe for more than a few days or is not controlled by your painkillers, you should contact your GP.

**Exercise:** We recommend you rest for 24 - 48 hours and then gradually increase your activity levels as you are able. Depending on the procedure you have had, it may take several days or even weeks until you feel back to your normal level of activity.

**Food and drink:** We recommend you increase your fluid intake for a few days to help your body eliminate the anaesthetic drugs, otherwise you may return to your normal diet. Avoid alcohol for 24hrs.

**Outpatient's appointment:** This is not always needed. If a follow up appointment is required this will be sent to you by post.

Any tissue that has been removed for laboratory analysis will be sent to the Pathology department and the results will be given to you either at your outpatient appointment or will be sent to you by post.

## **Contact your GP or GP out-of-hours service if you have any problems such as:**

- New or uncontrolled bleeding
- Severe bruising
- Pain that is not controlled with pain killers
- Uncontrolled vomiting
- Difficulty in passing urine
- Your operation site becomes increasingly swollen, red, hot and/or produces a discharge as you may have an infection.

If you require further advice, please contact: The Martin Corke Day Surgery Unit on 01284 713050 between 7.45am and 8.00pm Monday to Friday

### **References**

1 Mertes PM, Laxenaire MC, Alla F. Anaphylactic and anaphylactoid reactions occurring during anesthesia in France in 1999–2000. *Anesthesiol* 2003;99:536–545.

2 Savic et al. Incidence of suspected perioperative anaphylaxis: A multicentre snapshot study. *J Allergy Clin Immunol: In Practice* 2015;3:454- 455.

3 BSACI Guidelines for the investigation of suspected anaphylaxis during general anaesthesia. *CI Exp All* 2009;40:15–31.

4 Suspected Anaphylactic Reactions Associated with Anaesthesia. AAGBI, London 2009 (<http://bit.ly/2f1KMbu>).

*If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (the new name for DisabledGo)*  
<https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust>

