Royal College of Anaesthetists

You and your anaesthetic: a young person's web guide

Information to help teenagers and young people prepare for an anaesthetic

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This leaflet gives information to help you prepare for your anaesthetic. It has been written by patients, patient representatives and anaesthetists, working together.

Some types of anaesthesia

Anaesthesia stops you feeling pain and other sensations. It can be given in various ways and does not always make you unconscious.

- Local anaesthesia involves injections which numb a small part of your body. You stay conscious but free from pain.
- Regional anaesthesia involves injections which numb a larger or deeper part of the body. You stay conscious but free from pain.
- General anaesthesia gives a state of controlled unconsciousness. It is essential for some operations. You are unconscious and feel nothing.

Anaesthetists

Anaesthetists are doctors with specialist training who:

- discuss types of anaesthesia with you and find out what you would like, helping you to make choices
- 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
- help plan your care, if needed, in the intensive care unit
- make your experience as calm and pain free as possible.

Before coming to hospital

Here are some things that you can do to prepare yourself for your operation:

- avoid breathing cigarette smoke for at least six weeks before your operation. This reduces the risk of breathing problems and makes your anaesthetic safer. The longer you can give up smoking beforehand, the better. If you cannot stop completely, cutting down will help
- if you are very overweight, reducing your weight will reduce many of the risks of having an anaesthetic
- if you have loose teeth or crowns, treatment from your dentist may reduce the risk of damage to your teeth if the anaesthetist needs to put a tube in your throat to help you breathe
- if you have a long-standing medical problem, such as diabetes, asthma, heart problems or epilepsy, you should ask your GP if you need a check up
- if you are pregnant or think that you might be, you should ask your GP for a check up. It is also very important to make sure that your anaesthetist and surgeon know, because of possible risks to you and the baby. Please telephone the ward for confidential advice and see more information below.

Pregnancy

Please tell your anaesthetist if you are pregnant or think that you might be. You should be able to discuss this confidentially. If there is any possibility that you could be pregnant, please make sure that you are tested before your anaesthetic. Ideally non-urgent surgery should be postponed until after your baby's birth. Sometimes it is not possible to delay the surgery, for example in an emergency, but the risks to you will be slightly higher than if you were not pregnant, and there may be a risk to your baby.

Even within eight weeks of becoming pregnant (your period may only be a few weeks late), there are many changes happening within your body. How drugs affect your body, and how your body deals with drugs can be different during pregnancy. Some drugs that are sometimes used during anaesthesia may damage an unborn baby and are best avoided. There is also a chance of miscarriage (losing your baby).

For all of these reasons it is safer to postpone the anaesthetic and surgery until your baby is born. If this is not possible, the anaesthetist will adjust the anaesthetic to make it safer for you and your baby. Just let them know!

Before your anaesthetic

You will be asked some questions to check your health before your operation. This may be at a pre-assessment clinic, by filling in a questionnaire, by talking to doctors on the ward, or when you meet your anaesthetist.

It is important for you to bring a list of any allergies you may have and all the pills (including the contraceptive pill), medicines, herbal remedies or supplements you are taking – ones that have been prescribed, those that you have purchased over the counter and anything taken for recreational purposes.

Why is this so important?

Please tell your anaesthetist if you are taking any of the following or have recently stopped: pills, medicines, herbal remedies or supplements, including prescribed, over the counter, or recreational drugs. All of these substances are important for your anaesthetist to know about as they may:

- affect the way in which anaesthetics work on your body, for example you may need a lot more anaesthetic to keep you unconscious
- affect the way your body deals with anaesthetic drugs, for example, certain anaesthetic drugs may take longer to wear off so you regain consciousness much more slowly after your anaesthetic
- determine the type of anaesthetic which is safest for you.

With this information, your anaesthetist should be able to adjust the anaesthetic to make it safer for you.

On the day of your operation

Nothing to eat or drink – fasting ('nil by mouth')

The hospital should give you clear instructions about fasting. It is important to follow these. If there is food or liquid in your stomach during your anaesthetic, it could come up to the back of your throat and then get down into your lungs and damage them.

If you are a smoker, ideally you should have given up smoking for at least six weeks. However, you should definitely not smoke on the day of the operation. Not smoking helps avoid breathing problems during your anaesthetic.

If you are taking medicines, you should continue to take them as usual, unless your anaesthetist or surgeon has asked you not to. For example, if you take drugs to stop you having convulsions (anti-convulsants), insulin for diabetes, or herbal remedies, you will need specific instructions.

If you feel unwell when you are due to come into hospital, please telephone the ward for advice.

Meeting your anaesthetist

Your anaesthetist will meet you before your operation and will:

- discuss your health
- discuss with you which types of anaesthetic can be used
- discuss with you the benefits, risks and your preferences
- decide with you which anaesthetic would be best for you, or decide for you if you would prefer them to.

Nothing will happen until you and/or your parent or guardian understand and agree with what has been planned for you. If you are 16–18 years old, you can give consent to the anaesthetic. The anaesthetist does not have to ask your parent or guardian for consent as well. However, until you reach the age of 18 (16 in Scotland), if you decide to refuse, your parents or guardian may become involved. If you are under the age of 16, you may be able to give consent for yourself providing you are able to understand what is involved, but it's a good idea to include your parents or guardian in your decision.

Consent

Nothing will happen until you and/or your parent or guardian understand and agree with what has been planned for you. You will usually be asked for your signed consent (or permission) for an operation or test to be carried out, but you are often only asked for your verbal consent for the anaesthetic.

The rules regarding consent for children and young people are different in Scotland compared with the rest of the United Kingdom. If you are under the age of 16, you may be able to give consent for yourself, providing you are able to understand what is involved. You may wish your parents or guardian to be involved, so they can help you to make your decision. If you are 16 years or older, you can give consent for the anaesthetic and surgery and the doctors do not need to ask your parents for permission as well. In Scotland, you are also able to refuse treatment at this age, but in the rest of the UK, your parents may be able to decide about treatment on your behalf, up to your 18th birthday.

Rights of young people to consent to or refuse treatment

Consent is just as important when treating young people as it is in adults.

When health professionals care for you, they have a duty to act in your best interests and do what they think is the best thing for you. When decisions are being made about your treatment you have a right to be involved at every stage of the process.

Consent is your agreement for health professionals to carry out a particular treatment, examination, or procedure.

If you are not able to consent to a treatment yourself, your doctors will need the consent of a person with parental responsibility or, in special circumstances, a court.

For consent to be valid:

- you must be competent or have the capacity to make the decision
- you must have enough information to make a choice and you must be able to give your consent without being forced into it.

Competence

Competence is a characteristic you possess to be able, with help and support, to understand, remember and use information, balance risks and benefits, reach a decision about a treatment and then communicate the decision you have made. If you are competent to make a decision, then you also have capacity.

Capacity

You are considered to have the capacity to give informed consent for a medical examination, procedure or treatment if you can:

- understand the advice provided/proposed treatment
- understand the potential consequences
- make an informed choice
- communicate the decision you have made.

Capacity is task-specific, which means that you may be able to consent to some procedures but not others, depending on the nature and complexity of the proposed treatment. Healthcare professionals must make an assessment of your capacity to consent at the time each decision needs to be made.

Choice

Information you might need to make a choice about consent includes:

- why is the treatment a good thing?
- what does it involve?
- are there any alternatives?
- can anything bad happen as a result of the treatment?
- what are the chances of something bad happening?
- what would happen if you didn't go ahead with the treatment?

Rules are different depending on your age, whether you are competent (also known as being capable) and the country you are in within the UK. The law on these matters is different in England, Wales and Northern Ireland compared to Scotland.

For further details, find the country you are living in below and see which rules apply to you.

England, Wales and Northern Ireland

Aged 18 and over

If you are 18 years or older you are assumed to be a competent adult capable of consenting to or refusing treatment, unless there are other factors which prevent you from doing so. If you lack the capacity to make decisions for yourself, either temporarily or permanently, your parent and relatives do not have the authority to give consent on your behalf. The Mental Capacity Act 2005 gives medical professionals the ability to provide carefully considered treatment that is in your best interests.

Aged 16 and 17

The legal age of capacity in England, Wales and Northern Ireland is 18 years. However, once you have reached the age of 16 you are assumed to have the same capacity as an adult to consent to treatment. You do not need parental consent for treatments unless there is reason to believe you lack capacity. If you are under 18 and find it too difficult to decide, perhaps because the decision feels overwhelming, your parents or guardian can give consent on your behalf.

If you want to refuse to consent to treatment when you have capacity, the rules say that your parents may still decide that it is in your best interests to have a particular treatment and give their consent on your behalf. This rule applies until you reach the age of 18. However, it is very unusual for a disagreement to get this far without being sorted out.

In very serious or complicated situations, a court can be asked to decide whether it is right for your doctor to go ahead with a particular treatment. This might happen, for example, if you and your parents disagreed over whether you should have a very serious operation.

Your doctors have a duty of confidentiality to you and should not give your parents any information about discussions they have had with you without your consent, except if essential to protect you or someone else from serious harm. Even if you have the capacity to consent for yourself, it is often a good idea to talk things through with a parent or carer – they may be able to help you think through your decision and support you better.

When young people aged 16 and over lack the capacity to make decisions for themselves because of an impairment of the functioning of the mind or brain, parents and relatives do not have the authority to give consent on their behalf. The Mental Capacity Act 2005 gives medical professionals the ability to provide carefully considered treatment that is in their best interests.

Aged under 16 (also applies to Scotland)

If you are under the age of 16, you can consent to medical treatment if you fully understand what is going to happen. It is up to your doctor to decide if you have the ability to understand and remember the nature of the treatment, the options, the risks involved and the benefits. You must be able to understand fully what having or not having the treatment would mean for you and you must be able to weigh up this information to make this decision.

If you do have this understanding you are said to be 'Gillick' competent. Your parents cannot overrule your decision to consent to treatment. You may have better understanding of certain treatments than others depending on the circumstances. This means that you may be able to

consent to some treatments but not to others. A competent child is legally entitled to withhold consent to treatment, but sometimes this can overridden by those with parental responsibility. Sometimes it is necessary to ask the court to decide whether a treatment should be given if it is against a competent young person's wishes.

If you are under 16 and your doctors do not feel that you fully understand the nature and consequences of having or not having a certain treatment, those with parental responsibility for you will make a decision for you. This is usually your mum or dad.

Occasionally you and your parents may not want to consent to treatment. If the doctors feel you would come to harm by not having the treatment, they might ask the courts to help in making a decision. This could mean you having a treatment against your and your parent's wishes, but this is rare.

In an emergency, when the person who has parental responsibility for you is not available to consent, the doctors have to decide how best to treat you to keep you healthy. They are able to go ahead with an emergency treatment if you need it and would speak to the person with parental responsibility as soon as possible.

Scotland

Aged 16 and over

The law in Scotland generally presumes that if you are aged 16 and over, you legally have the capacity to make personal decisions and manage your own affairs. This includes giving consent for medical procedures, examinations and investigations. Your parents do not need to be involved in the consent process, although you may wish to discuss your decision with them.

If a person over 16 lacks capacity to make decisions, due to a mental illness or learning disability, the medical professional in charge of their care must complete a Certificate of Incapacity under section 47 of the Adults with Incapacity (Scotland) Act 2000, which clearly states the reason for the lack of capacity. Treatment which is of benefit to the person may then be given. Parents are not authorised to give consent in these circumstances unless they have obtained guardianship through the courts.

You can read more information in the following guides:

Consent: what you have a right to expect. A guide for children and young people

Consent to treatment – children and young people

Choice of anaesthetic

The choice of anaesthetic depends on:

- your operation
- your answers to the questions you have been asked
- your physical condition
- your preferences and the reasons for them
- your anaesthetist's recommendations for you and the reasons for them
- the equipment, staff and other resources at your hospital.

Premedication (a 'premed') is the name for drugs which are given before some anaesthetics. Some premeds prepare your body for the anaesthetic, others help you to relax. They may make you more drowsy after the operation.

If you want to go home on the same day, this may be delayed. If you think a premed would help you, ask your anaesthetist.

A cannula may be used to start your anaesthetic. You may be offered local anaesthetic cream, which would be put on your hand or arm to numb the skin before you leave the ward. The ward nurses should be able to do this.

If you are having a local or regional anaesthetic, you will also need to decide whether you would prefer to:

- be fully alert
- be relaxed and sleepy (sedation)
- have a general anaesthetic as well.

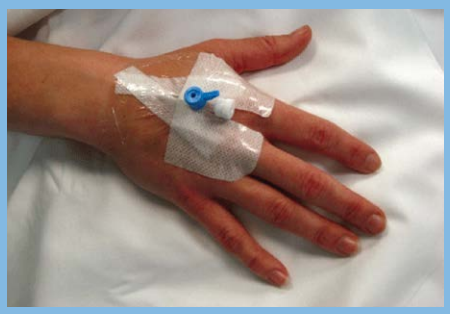
Sedation is the use of small amounts of anaesthetic or similar drugs to produce a 'sleepy-like' state.

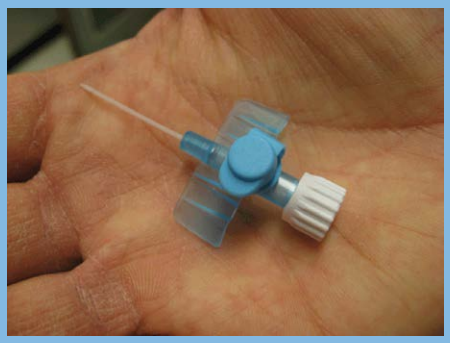
Why is there so much waiting around?

Many hospitals will ask you to arrive on the ward well before your expected time of surgery.

The main reason for this is so that you can meet your surgeon and anaesthetist before they start work in the operating theatre – once they are there it can be very difficult for them to leave again until all the patients are safely awake.

A cannula is a thin plastic tube that is put into a vein, usually on the back of the hand. A small needle is used to put the cannula in then the needle is removed straight away. Placing the cannula may hurt but once it is in place it should not be too sore. Before you leave the ward, you may be offered a numbing cream for the back of your hand to reduce the pain of having a cannula.





Sometimes, it can take more than one attempt to insert the cannula. You may be able to choose where your cannula is placed. Once the cannula is in place, your medicines can be injected through it without using any more needles. Placing a cannula is a routine safety precaution used in nearly all general and regional anaesthetics. Your cannula is usually left in place after the operation in case you need painkillers or other medicines later.

It's a good idea to bring something to do, as the waiting around can be quite boring. Something fairly small like a book, a magazine, a mobile or iPad with headphones, or hand held game would be ideal. Valuable items could get lost or damaged. Use of mobile phones is severely limited in hospital and should be switched to flight safe mode so as to stop all calls.

When you are called for your operation

- A member of staff will go with you to the theatre.
- A parent or carer (a relative or friend) should be able to go with you to the anaesthetic room if you like. Please discuss with your ward nurse who you would like to accompany you. Once you are anaesthetised they will be able to wait for you in a nearby area outside the theatres. If you would prefer to come to theatre with only a member of staff that's fine too – just say.
- You will usually be asked to wear a hospital gown or pyjamas to go to theatre (see below). Occasionally you might be able to wear your own clothes – choose something loose and comfortable that will be easy to wash afterwards.
- You can wear your glasses until you are in the anaesthetic room. If you are having a local or regional anaesthetic, you may keep them on. Please don't wear contact lenses for your operation.
- Jewellery and decorative piercing should ideally be removed. If you cannot remove your jewellery, it can be covered with tape to prevent damage to it or to your skin. Please remove your nail varnish and/or any gel or acrylic false nails.
- If you are having a local or regional anaesthetic, you may be able to take a mobile (switched to flight safe mode) or iPad with you to listen to music through your headphones.
- Most people go to theatre on a bed or trolley. You may be able to walk. If you are walking, you will need your dressing gown and slippers.
- Theatre staff will check your identification bracelet, your name and date of birth, and will ask you about other details in your medical records as a check that you are having the right operation.

Hospital gowns

Hospitals might ask you to wear a gown because:

- it is important that you wear something loose fitting
- the anaesthetic team will need to be able to apply the ECG monitor to your chest
- the surgeon will need access to the site of your operation, and to quite a large area around there, so that he or she can make everything properly sterile
- hospital gowns should carry less germs than street clothes
- personal clothing might be lost or damaged if it is removed during surgery. It could be stained by blood or antiseptic if it's not removed. If you do plan to wear your own clothes to go to theatre, bring a change of clothes to travel home.

Pulse oximeter

Connected to you by a small clip, this monitor can be placed on your finger, toe or ear. It detects your pulse and calculates how much oxygen your blood is carrying. The reading is given as a percentage of the maximum amount of oxygen that your blood can possibly carry.

Nail varnish can reduce the accuracy of this monitor, and this is one of the reasons why you will be asked to remove nail varnish before coming to theatre.

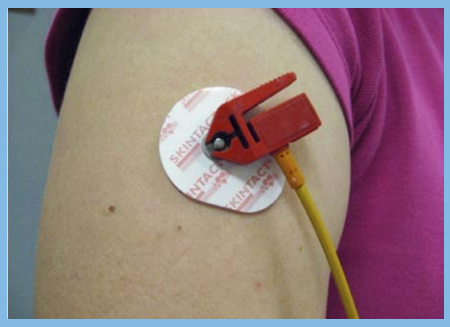
The operating department ('theatres')

Your anaesthetic may start in the anaesthetic room (top image) or in the operating theatre (bottom image).

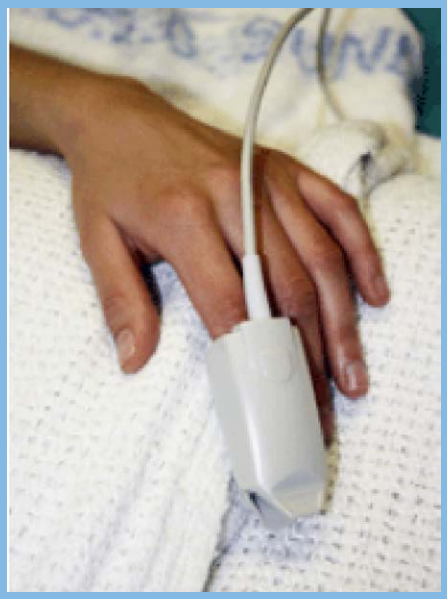
ECG Monitor

The ECG (or electrocardiogram) is connected to you by three or five sticky dots on your chest.

It continuously monitors the electrical activity of your heart. An ECG can detect changes in the speed or rhythm of your heart.



Pulse oximeter



Who will be in the anaesthetic room?

- You.
- Your parent or carer, or occasionally, another relative or a friend. Please discuss with your ward nurse who you would like to accompany you to the anaesthetic room.
- A nurse to look after you and your accompanying person.
- Your anaesthetist.
- A member of the theatre team who is trained to work with and assist the anaesthetist (called an operating department assistant or an ODP, or an anaesthetic nurse).
- Your surgeon, who might make a final check on the correct site for your surgery.
- Possibly someone who is there to learn. This could be:
  - a doctor in specialist training
  - a student doctor or nurse
  - a theatre worker or paramedic.

Trainees and students may assist in your care. They are closely supervised at all times.

Monitoring patients in the operating theatre

The anaesthetist will attach machines which measure your heart rate, blood pressure and oxygen levels. Your anaesthetist will be with you continuously and will be helped by the following machinery:

- **ECG (electrocardiogram)** – connected to you by three or five sticky dots, the ECG continuously monitors the electrical activity of your heart. An ECG can detect changes in the speed or rhythm of your heart.
- **Blood pressure machine** – connected to you by a cuff on your arm. This machine will check your blood pressure every few minutes. The cuff can get extremely tight while the machine is taking a reading – the best thing to do is to keep as still as possible and try to relax until the tightness goes away. You do not feel it while you are unconscious.
- **Pulse oximeter** – connected to you by a small clip, this monitor can be placed on your finger, toe or ear. It detects your pulse and calculates how much oxygen your blood is carrying. The reading is given as a percentage of the maximum amount of oxygen that your blood can possibly carry. Nail varnish can reduce the accuracy of this monitor, and this is one of the reasons why you will be asked to remove nail varnish or any gel/acrylic false nails before coming to theatre.

Additional routine monitoring for people having general anaesthesia:

- **anaesthetic gas monitoring** – a plastic tube continuously takes samples of the gases you breathe in and out. These samples are analysed to see how much oxygen and anaesthetic you are breathing in, and how much carbon dioxide you are breathing out. When combined with the information from the ECG, blood pressure machine and pulse oximeter, this helps your anaesthetist to know how deeply you are anaesthetised, and how well your body is tolerating the stresses of surgery and anaesthesia.

Types of anaesthetic

Local and regional anaesthetics

- Your anaesthetist will ask you to keep quite still while the injections are given.
- You may notice a warm tingling feeling as the anaesthetic begins to take effect.
- Your operation will only go ahead when you and your anaesthetist are sure that the area is numb.
- If you are not having sedation you will remain alert and aware of your surroundings. A screen shields the operating site, so you will not see the operation unless you want to.
- Your anaesthetist is always near to you and you can speak to him or her whenever you want to.

General anaesthetics

There are two ways of starting a general anaesthetic. Depending on the circumstances, it might be possible for you to choose which to have:

- anaesthetic drugs may be injected into a vein through the cannula, or
- you can breathe anaesthetic gases and oxygen through a mask, which you may hold if you prefer. If you start your anaesthetic this way, your anaesthetist will place a cannula once you are unconscious.

Why do you still need a cannula after breathing in your anaesthetic?

Although the anaesthetic you breathe will keep you unconscious, you might also need injections of other drugs during your anaesthetic. Examples of this would be pain-relieving medicines, or drugs to help your muscles relax completely during surgery.

If you have not been able to drink for many hours before your operation, or you have lost fluids from being sick, you may have become dehydrated. Bags of sterile water with added salt or sugar can be given through a drip into your cannula to keep the right level of fluids in your body.

An anaesthetist stays with you at all times while you are unconscious and continues to give you drugs to keep you anaesthetised.

During your anaesthetic you may have a dream, but not everyone will do so. As soon as the operation is finished, the drugs will be stopped or reversed so that you quickly regain consciousness.

Dreaming under anaesthetic

With modern anaesthetics, dreaming is less common than it used to be. For example around 1 in 10 younger people dream during their anaesthetic.

Dreams tend to be mostly pleasant ones and they are not usually about hospital experiences. You are probably more likely to dream during your anaesthetic if you remember your dreams a lot at home after a normal sleep, and the dreams are likely to be similar too.

After the operation, you may be taken to the recovery room. Recovery staff will be with you at all times. When they are satisfied that you have recovered safely from your anaesthetic you will be taken back to the ward.

Pain relief afterwards

Good pain relief is important and some people need more pain relief than others. It is much easier to relieve pain if it is dealt with before it gets bad. Pain relief can be increased, given more often, or given in different combinations.

Occasionally, pain is a warning sign that all is not well, so you should ask for help when you feel pain. Here are some ways of giving pain relief:

- **pills, tablets or liquids to swallow** – These are used for all types of pain. They take at least half an hour to work. You need to be able to eat, drink and not feel sick for these drugs to work.
- **intravenous medicines** – These are often needed and are given through your cannula into a vein for a quick effect.
- **suppositories** – These waxy pellets are put in your back passage (rectum). The pellet dissolves and the drug passes into the body. They are useful if you cannot swallow or if you might vomit.
- **patient-controlled analgesia (PCA)** – This is a method using a machine that allows you to control your pain relief yourself. More information about PCA can be found below.
- **local anaesthetics and regional blocks** – More details can be found in the RCoA leaflet: Epidural pain relief after surgery. Often a combination of methods may be used to get the best pain-relieving effect.

What is PCA?

Patient-controlled analgesia is a way of giving you pain relief after your operation that allows you to control your pain relief yourself. If you are having a PCA, you will be connected to a pump containing a pain-relieving medicine – usually morphine. The pump is linked to a handset that has a button. When you press the button, you receive a small dose of medicine painlessly into your cannula. The pump will be programmed for you individually, both to ensure that you receive an effective dose of pain relief, and also to ensure that you will not receive an overdose of medicine, no matter how often you press the button.

PCA pumps are very useful for keeping pain under control. If your pain is not controlled before using the PCA, you will need extra doses of pain relief to make sure that you are completely comfortable before you start to rely on the PCA only.

What will I feel like afterwards?

How you feel will depend on the type of anaesthetic and operation you have had, how much pain-relieving medicine you need, and your general health.

Understanding risk

In modern anaesthesia, serious problems are uncommon. Risk cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. To understand a risk, you must know:

- how likely it is to happen
- how serious it could be
- how it can be treated.

The risk to you as an individual will depend on:

- whether you have any other illness
- personal factors, such as smoking or being overweight
- surgery which is complicated, long, or done in an emergency.

Side effects and complications

Anaesthetic risks can be described as side effects or complications. These words are somewhat interchangeable, but are generally used in different circumstances, as shown below.

Side effects are the effects of drugs or treatments which are unwanted, but are generally predictable and expected. For example, sickness is a side effect of a general anaesthetic, although steps are taken to prevent it.

Complications are unwanted and unexpected events due to a treatment. However, they are recognised as events that can happen. An example is a severe allergic reaction to a drug, or damage to your teeth when inserting a breathing tube. Anaesthetists are trained to prevent complications and to treat them if they occur.

Index of side effects and complications

The following scale shows what is meant in this booklet when a risk is described in words.

Very common	Common	Uncommon	Rare	Very rare
1 in 10 One person in your family	1 in 100 One person in a street	1 in 1,000 One person in a village	1 in 10,000 One person in a small town	1 in 100,000 One person in a large town

For example, if something is 'very common' it means that about 1 in 10 people will experience it. It also means it will not happen to about 9 out of 10 people.

Using this index

The index below lists possible side effects and complications according to how likely they are to happen.

The index starts with 'very common' and 'common' side effects and finishes with 'rare' or 'very rare' complications.

RA = risk relevant to regional anaesthesia

GA = risk relevant to general anaesthesia

If you see the above symbol next to the item, it means you can find more detailed information about this risk on the website here: www.rcoa.ac.uk/patientinfo.

Very common and common risks

Feeling sick and vomiting **RA GA**

Some operations, anaesthetics and pain-relieving drugs are more likely to cause sickness than others. Anti-sickness drugs are routinely given with most anaesthetics and extra doses can be given to treat feeling sick (nausea) or vomiting.

Sore throat **GA**

For most general anaesthetics, the anaesthetist will place a tube in your airway to help you breathe. This can give you a sore throat. The discomfort or pain may last from a few hours to a few days. It is treated with pain-relieving drugs.

Dizziness and feeling faint RA GA

Anaesthetics can cause low blood pressure. Your anaesthetist will treat low blood pressure with drugs and fluid into your drip, both during your operation and in the recovery room. You will only go from the recovery room back to the ward when your blood pressure is stable.

Shivering RA GA

You may shiver if you get cold during your operation. Care is taken to keep you warm and to warm you afterwards if you are cold. A hot-air blanket may be used. Shivering can also happen even when you are not cold, as a side effect of anaesthetic drugs.

Headache RA GA

There are many causes of headache after an anaesthetic. These include the operation, dehydration, and feeling anxious. Most headaches get better within a few hours and can be treated with pain-relieving medicines.

Severe headaches can happen after a spinal or epidural anaesthetic. If this happens to you, your nurses should ask the anaesthetist to come and see you. You may need another treatment to cure your headache.

Chest infection RA GA

A chest infection is more likely to happen after major surgery on the chest or abdomen, after emergency surgery, and after surgery for people who smoke. It is treated with antibiotics and physiotherapy. In some circumstances, having an RA, rather than a GA, can reduce the risk of a chest infection. Occasionally severe chest infections develop which may need treatment in the intensive-care unit. These infections can be life-threatening.

Itch RA GA

This is a side effect of opiate pain-relieving medicines. It can also be caused by an allergy to anything you have been in contact with, including drugs, sterilising fluids, stitch material, latex and dressings. It can be treated with drugs.

Aches, pains and backache RA GA

During your operation you may lie in the same position on a firm operating table for a long time. You will be positioned with care, but some people still feel uncomfortable afterwards.

Muscle pains can also happen if you receive a drug called suxamethonium. Your anaesthetist will tell you if you need this drug.

Pain when drugs are injected **RA GA**

Some drugs used for general anaesthesia or for sedation given with regional anaesthesia cause pain when injected.

Bruising and soreness **RA GA**

These can happen around injection and drip sites. They may be caused by a vein leaking blood around the cannula or by an infection developing. They normally settle without treatment once the cannula is removed.

Confusion or memory loss **GA**

This is common among older people who have had a GA. It may be due to an illness developing, such as chest or urine infection. There are other causes which the team looking after you will take care to treat. It usually recovers, but can take days, weeks or months.

Bladder problems **RA GA**

Difficulty passing urine, or leaking urine, can happen after most kinds of moderate or major surgery. If this happens, the team looking after you will consider whether you need a urinary catheter (soft tube) placed in the bladder, which drains the urine into a bag. If the difficulty is expected to get better very soon, it is best to avoid putting in a catheter if possible, because urine infection is more likely if you have a catheter. Your nurses will make sure that you are clean and dry as soon as possible. Most bladder problems get better, so that your normal urinary habit returns before you leave hospital.

Uncommon risks

Breathing difficulty **GA**

Some people wake up after a general anaesthetic with slow or slightly difficult breathing. If this happens, you will be cared for in the recovery room with your own recovery nurse until your breathing is better.

Damage to teeth, lips and tongue **GA**

Damage to teeth happens in 1 in 4,500 anaesthetics. Your anaesthetist will place a breathing tube in your throat at the beginning of the anaesthetic, and this is when the damage can happen. It is more likely if you have fragile teeth, a small mouth, or a stiff neck. Minor bruising or small splits in the lips or tongue are common, but heal quickly.

Awareness GA

Awareness is becoming conscious during some part of a general anaesthetic. It happens because you are not receiving enough anaesthetic to keep you unconscious. The anaesthetist uses monitors during the anaesthetic which show how much anaesthetic is being given and how your body is responding to it. These should allow your anaesthetist to judge how much anaesthetic you need.

If you think you may have been conscious during your operation, you should tell any member of the team looking after you. Your anaesthetist will want to know so they can help you at this time and with any future anaesthetic you may have.

Damage to the eyes GA

It is possible that surgical drapes or other equipment can rub the cornea (clear surface of the eye) and cause a graze. This is uncomfortable for a few days, but with some eye-drop treatment it normally heals fully. Anaesthetists take care to prevent this. Small pieces of sticky tape are often used to keep the eyelids together, or ointment is used to protect the surface of the eye. Serious and permanent loss of vision can happen, but it is very rare.

Nerve damage RA GA

Nerve damage (paralysis or numbness) has a number of causes during local, regional or general anaesthetics. It varies with the type of anaesthetic you are having. Temporary nerve damage can be common with some types of anaesthetic, but full recovery often follows. Permanent nerve damage to nerves outside the spinal column is uncommon.

Existing medical conditions getting worse RA GA

Your anaesthetist will make sure that any medical condition you have is well-treated before your surgery. If you have previously had a heart attack or a stroke, the risk that you will have another one is slightly increased during and after your operation. Other conditions such as diabetes, high blood pressure and asthma will be closely monitored and treated as necessary.

Rare or very rare complications

Serious allergy to drugs RA GA

Allergic reactions can happen with almost any drug. Your anaesthetist uses continuous monitoring which helps make sure that any reaction is noticed and treated before it becomes serious. Very rarely, people die of an allergic reaction during an anaesthetic. It is important to tell your anaesthetist about any allergies you know you have.

Damage to nerves in the spine RA GA

Permanent damage to the nerves in your spine is very rare after either a general anaesthetic, spinal or epidural anaesthetics.

Equipment failure RA GA

Many types of equipment are used during an anaesthetic. Monitors are used which give immediate warning of problems, and anaesthetists have immediate access to back-up equipment. The chance of a serious event due to equipment failure is rare or very rare.

Death RA GA

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics given in the UK.

You can find more information leaflets on the College website www.rcoa.ac.uk/patientinfo. The leaflets may also be available from the anaesthetic department or pre-assessment clinic in your hospital.

Questions you may like to ask your anaesthetist

1. Who will give my anaesthetic?
2. Do I have to have a general anaesthetic?
3. What type of anaesthetic do you recommend?
4. Have you often used this type of anaesthetic?
5. What are the risks of this type of anaesthetic?
6. Do I have any special risks?
7. How will I feel afterwards?

Royal College of Anaesthetists

Tell us what you think

We welcome suggestions to improve this leaflet. If you have any comments that you would like to make, please email them to patientinformation@rcoa.ac.uk

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This leaflet will be reviewed within five years of the date of publication.