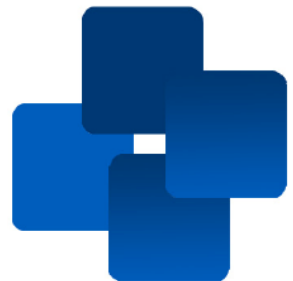


Patient Information

Your anaesthetic procedure

Anaesthesia Department



Before your procedure

Your anaesthetist will visit you immediately before your surgery. At this time you will have an opportunity to discuss the anaesthetic procedure further and ask any questions.

Venous cannula

Whether your procedure is to be performed under a general anaesthetic or a nerve block (where part of your body is made numb for the surgery), a cannula (a thin tube) will need to be inserted into a vein before the procedure starts. This will allow the anaesthetist to administer any medicines which are required.

Insertion of this cannula requires use of a needle where there will be an element of discomfort when inserted. Whenever the skin is breached there is always the associated risk of infection and bleeding / bruising. Sterile equipment will be used and the skin will be cleaned before insertion, but as these risks are still present you should report any increased pain or redness around the site, particularly if the cannula is in place for a few days.

General anaesthetic

If you are to receive a general anaesthetic and 'go to sleep' for the surgery, then the anaesthetist will administer medicines via the cannula to induce anaesthesia. After you are asleep the anaesthetist will insert a breathing tube into your mouth in order to support your breathing. At this time there is a small risk of damage to your teeth, gums and lips. It is quite a small risk unless you have bad or loose teeth already, when the risk will be somewhat increased. It is very common to have a bit of a sore throat when you wake up after the surgery due to having the breathing tube inserted and removed. The breathing tube is normally removed as you wake up, occasionally some individuals may remember having it removed as they wake from the anaesthetic.

At the time of general anaesthetic some form of pain relief will be given, either as medicines or a block, and you will also receive anti-sickness medicines. However, if you experience an unacceptable level of discomfort or nausea after you wake up, please inform the recovery nurse and further medicines may be given to you.

Further invasive lines for your procedure

Some individuals, or their procedures, require insertion of further lines (tubes) into larger veins or arteries. These will usually be required for close monitoring or administration of further drugs during the surgery. Your anaesthetist will inform you if these are going to be required. Often these are inserted after you are asleep, but sometimes they may need to be inserted before you go to sleep; if this is the case the area will be numbed with local anaesthetic before they are inserted.

The risks related to these lines are similar to those of the cannula already mentioned; if you are awake at the time of insertion then some level of discomfort should be expected. Since the skin is breached and the lines are inserted into a blood vessel, there is the risk of infection at the site or into the bloodstream, and the vessel wall can occasionally be damaged. There is also the small risk of damage to areas around the blood vessel into which the lines are being inserted, which may include surrounding nerves or the lining of the lung. Generally, these risks are small and these lines will only be inserted if required. Please ask your anaesthetist to clarify or discuss further before your surgery if these are required.

Anaesthetic nerve blocks

Some surgery can take place with you either totally awake and clear headed, or with just a little bit of sedation to make you sleepy during the surgery. For this to take place a block will be performed by the anaesthetist to make a part of your body numb so that no pain is experienced at the time of the procedure. Also, a block may be performed in addition to a general anaesthetic, in order to reduce post-operative pain. Your anaesthetist will discuss on the day of the procedure if they feel that a block is appropriate or required for the particular type of surgery that you are due to receive.

It should be made clear that if sedation is offered, this is not a general anaesthetic. The aim of sedation is generally to make you more relaxed and comfortable during the procedure, but not to induce loss of consciousness / loss of recall.

Some nerve blocks have specific risks associated with them depending upon which part of the body is involved. There are also general risks relevant to all blocks. Once again, when the skin is

breached in order to perform the block, there is a risk of bleeding and infection. You should always make sure that the anaesthetist is aware of any medicines you take, particularly if they affect blood clotting. Again, there is always the small risk of damage to structures within your body near to where the block is being performed, such as nerves and blood vessels. Generally, these risks are small and the anaesthetist would not suggest a block if they felt it to be unsafe or the risks to be high. Specific risks which are more common or serious in nature will be discussed at the time of meeting the anaesthetist.

Finally, nerve blocks have a risk of not working as well as was hoped. Surgery will never start if the anaesthetist is not confident that the block has been effective. However, if you do feel discomfort during the surgical procedure then please inform your anaesthetist, and they will take steps to ensure that you are made comfortable. This may then involve the need for a general anaesthetic.

Additional information

- Please be aware that if a block has been used then the relevant part of your body will remain numb and 'heavy' for a time after the surgery.
- Overall, anaesthesia is very safe and well tolerated. Please do ask any questions and discuss the procedure and any concerns you may have when you meet your anaesthetist prior to your operation.
- Whilst reading this booklet, please use the space on page 10 and to make any notes or to write down any questions or concerns you may wish to discuss.

Specific risks associated with your anaesthetic

Feeling sick

- Post-operative nausea or vomiting is **very common**, although the frequency does vary depending on the type of surgery, patient factors, and the drugs required.

Shivering

- Shivering can occur after general anaesthetic or a procedure to numb the lower half of your body. It is **very common** and usually settles quickly. Keeping yourself warm before the operation may help.

Sore throat following a general anaesthetic (GA)

- Sore/dry throat or hoarse voice - **very common**, usually settles within a few days.

Damage to teeth, lips & tongue

- **Minor injury**, e.g. bruise to lip or tongue - **common**.
- **Damage to teeth requiring subsequent removal or repair. Uncommon to rare.** Damage is more likely if your teeth are in a poor state, you have needed previous dental work, or you have difficulty opening your mouth or moving your neck etc.
- **Serious damage to the tongue** affecting tongue movement/sensation - **rare to very rare**.

Damage to eye/vision - surgical procedures not involving the eye

- **Corneal abrasion** (graze on the front of the eye) - can cause eye pain/blurred vision for a few days - **uncommon**. It is more likely if the surgery:
 - requires you to be face down or on your side
 - takes a long time
 - involves the head/neck

- **Serious eye injury/blindness - rare to very rare.** Risks include:
 - long procedures where the patient needs to be face down, particularly if the patient has diabetes / vascular disease - then risk may be classed as **uncommon**.
- **Swelling of eyelids/face** immediately post-operatively. **Common** for procedures where the patient has to lay in a face down or head down position for a prolonged period, e.g. some robotic or laparoscopic surgeries. Should be resolved quite quickly (within hours).

Chest infection after the operation

Symptoms and severity of a chest infection vary greatly. They are more common if:

- patient is overweight
- an older patient
- medical conditions involving chest/breathing, diabetes, immune system
- a major surgery
- immobile after the operation
- If there are none of the risk factors listed - risk is **unlikely**. The risk of chest infection is **very common** if high risk, i.e. has one or more of the risk factors listed above. Such patients will be monitored closely and measures taken to manage / reduce risk).

Post-operative confusion/cognitive dysfunction

- Post-operative delirium/confusion. This is **most common** if:
 - previous dementia / brain disorder
 - an older patient
 - high alcohol intake
 - poor sight / hearing
 - heart failure
 - emergency operation
 - major surgery
 - repeat surgical procedures required
 - post-operative complications

Post-operative delirium / confusion can often result in a longer hospital stay / need for increased support post-op. Some struggle to return to previous / pre-operative levels of independence.

Accidental awareness at time of surgery

- This means having some level of awareness when the anaesthetist intended for you to be unconscious (majority do not report experiencing any pain) - **rare to very rare**.

The Royal College of Anaesthetists performed a large study on this subject involving over 3 million general anaesthetics (GAs) – National Audit Project 5.

A severe reaction to one of the substances or drugs used at the time of anaesthesia

- Severe allergic reaction (anaphylaxis) - **rare**, with a 95% chance of survival if this does take place at the time of an anaesthetic.

The Royal College of Anaesthetists performed a large study on this subject involving over 3 million GAs – National Audit Project 6.

- Another serious non-allergic reaction to one of the medicines used at the time of anaesthesia - **very rare**. If you have any family history of reactions to anaesthetic drugs then please inform your anaesthetist.

Issues relating to a spinal or epidural block

- Some level of discomfort at time of insertion - **very common**
- Failure - **common**
- Headache / cerebral spinal fluid (CSF) leak - **common to uncommon**
- Serious infection, e.g. meningitis or abscess - **very rare**
- Bleeding/bruise/blood clot - serious localised blood clot which may need surgery to remove - **very rare**
- Nerve damage:
 - Most commonly temporary symptoms resolving in weeks or months - **uncommon**
 - Permanent or severe, e.g. paraplegia/death - **rare to very rare**

The Royal College of Anaesthetists performed a large study on this subject – National Audit Project 3

Nerve damage at time of a general anaesthetic

Causes:

- Direct pressure at time of surgery due to position
- Tourniquets (tight bands) used to reduce blood loss for surgery
- Damage due to the surgical procedure
- Inadequate blood supply

Factors that increase risk:

- Certain medical conditions, e.g. diabetes
- Older patient
- Very over or under weight
- Certain surgical procedures
- Positioning at the time of surgery - something other than completely flat on your back

Some nerves are more commonly affected than others due to where they run in your body, so care is usually taken to pad such areas. If there is a higher than usual risk of nerve damage associated with the surgery then the anaesthetist / surgeon will ensure that you are informed.

Nerve damage associated with a peripheral block

For example, direct injury, a toxic effect of a drug injected, effect of a blood clot, infection, or poor blood supply.

- Short term symptoms lasting longer than 48 hours, e.g. prolonged change in sensation (numbness / 'pins and needles), rarely weakness - **common**, but risk varies between different blocks. The majority (92-97%) recover within 4-6 weeks; 99% recover within a year.
- Permanent nerve damage - **uncommon to rare**.

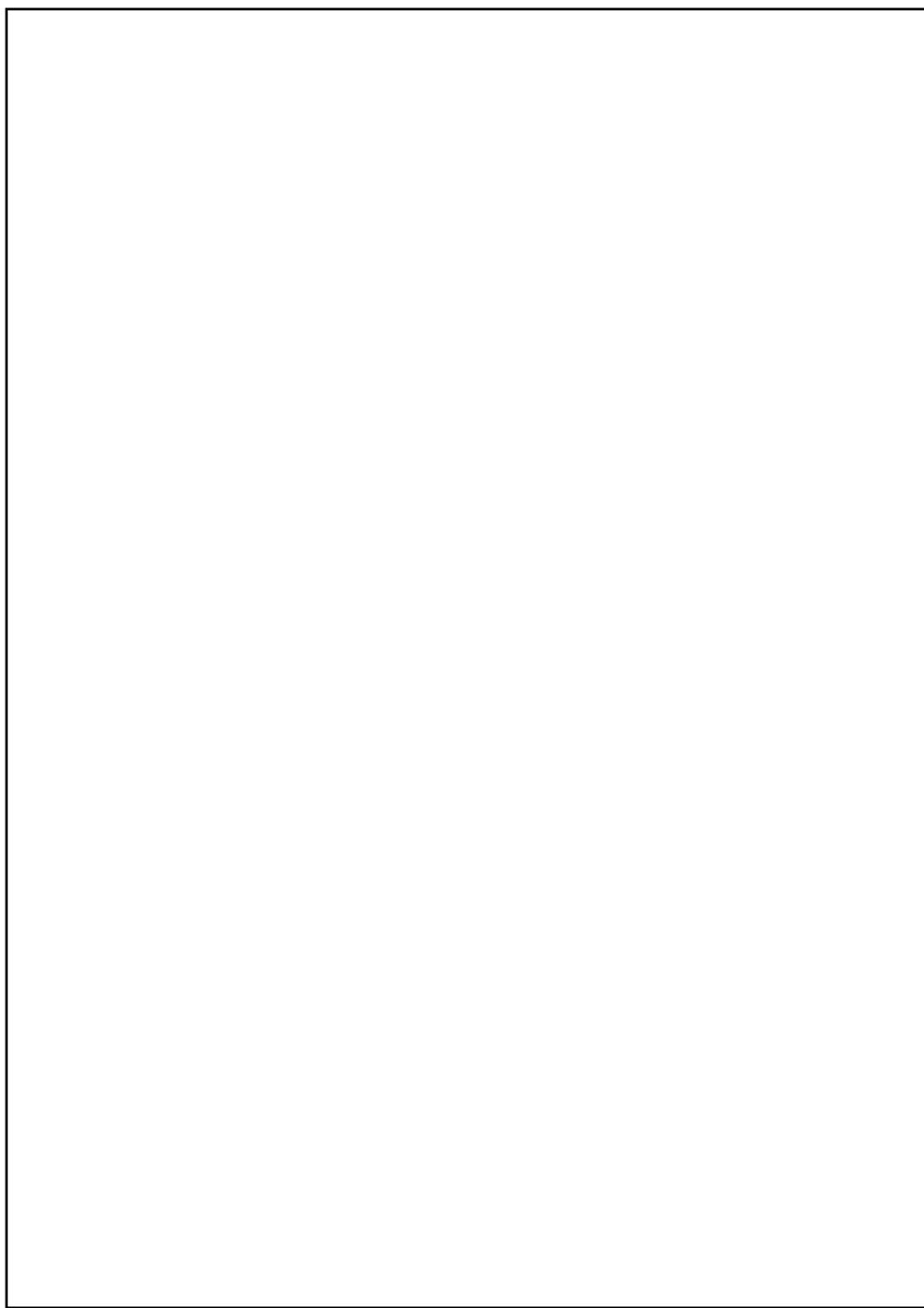
Death (as a direct result of anaesthesia)

- If you are considered 'higher risk' of anaesthetic complications then you will usually receive an appointment to see/discuss risks with an anaesthetic consultant in clinic before surgery.
- Death as a direct result of anaesthesia is **very rare**. Risk quoted on the Royal College of Anaesthetists website for a healthy patient having an elective operation is 1 in 100,000.

Guide to incidence of events:

	Frequency	Context
Very common	More than 1 in 10 people	Equivalent to one person in your family
Common	Between 1 in 10 & 1 in 100	Equivalent to one person in your street
Uncommon	Between 1 in 100 & 1 in 1,000	Equivalent to one person in a village
Rare	Between 1 in 1,000 & 1 in 10,000	Equivalent to one person in a small town
Very rare	Between 1 in 10,00 & 1 in 100,000 or more	Equivalent to one person in a large town

Please use this space to write down any questions you may wish to ask:



Contact Telephone Numbers

- Switchboard, Lister Hospital ☎ 01438 314333
- Pre-assessment Nursing Team ☎ 01438 288134 and
☎ 01438 288259

NHS 111 can help if you have an urgent medical problem and you're not sure what to do. It is available 24 hours a day, 7 days a week.

☎ 111

Further Information

The Royal College of Anaesthetists (RCoA) website:

www.rcoa.ac.uk/patient-information

www.rcoa.ac.uk/research/research-projects/national-audit-projects-naps

www.rcoa.ac.uk/patient-information/patient-information-resources/anaesthesia-risk/risk-leaflets

Obstetric Anaesthetists' Association (OAA) website:

www.labourpains.com/Epidural-Information-Card

Acknowledgement: Some of the information in this booklet has been adapted from The Royal College of Anaesthetists website and Obstetric Anaesthetists' Association website

Date of publication: March 2022

Author: Martin Gray

Reference: Version: 01

Review Date: March 2025

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