

# Local anaesthesia for your eye operation

Information for patients  
and families

This booklet is for anyone expecting to have an eye operation with a local anaesthetic. It has been written by patients, patient representatives and anaesthetists, working in partnership.

You can find more information in other leaflets in the series on the website [www.rcoa.ac.uk/patientinfo](http://www.rcoa.ac.uk/patientinfo). They may also be available from the anaesthetic department in your hospital.

The series includes the following:

- Anaesthesia explained (a more detailed booklet)
- You and your anaesthetic (a shorter summary)
- Your child's general anaesthetic
- Your spinal anaesthetic
- Epidurals for pain relief after surgery
- Headache after an epidural or spinal anaesthetic
- Your child's general anaesthetic for dental treatment
- Your tonsillectomy as day surgery
- Anaesthetic choices for hip and knee replacement
- Your anaesthetic for aortic surgery

### Risks associated with your anaesthetic

A collection of 14 articles about specific risks associated with having an anaesthetic has been developed to supplement the patient information leaflets. The risk articles are available on the website

[www.rcoa.ac.uk/patientinfo](http://www.rcoa.ac.uk/patientinfo).

Throughout this booklet we use these symbols:



To highlight your options or choices



To highlight where you may want to take action



To point you to more information

## Introduction

You have been offered an eye operation under local anaesthetic. This leaflet explains what a local anaesthetic for eye surgery is and gives a step-by-step guide to how the local anaesthetic will be given and monitored during your operation.

**Anaesthesia** – a painless state brought about by different drugs. ‘Anaesthesia’ means ‘loss of sensation’.

**Anaesthetics** – the drugs (gases, drops and injections) that are used for local or general anaesthesia.

**Anaesthetists** – doctors who have had specialist training in general and local anaesthesia, who look after children and adults before, during and after surgery. Eye surgeons are also trained to administer local anaesthesia for eyes.

## Local anaesthesia

A local anaesthetic is a drug which stops you feeling pain. It can be given as eye drops and/or injections. Once you have been given the local anaesthetic you will still be awake and aware of what is happening to you but the aim is that you feel no pain during the operation.

### What are the advantages of local anaesthesia?

A local anaesthetic generally works very well at preventing you feeling any pain during the operation. It also gives you pain relief after the operation for several hours. It usually has fewer risks and side effects than a general anaesthetic, especially if you are elderly. This is because it doesn't affect any other part of your body, such as your breathing or your heart. People recover more quickly following surgery under local anaesthetic and can go home on the same day. You can continue to take any prescribed medicine you are on and may be able to eat and drink as normal. Your hospital will advise you about this.

### I would really prefer a general anaesthetic, do I have a choice?

Yes. Nothing will happen to you until you understand and agree with what has been planned for you.

If you do have a preference for a general anaesthetic, you should discuss this with your anaesthetist or surgeon. There may be a medical reason why you should not have a general anaesthetic. You may need to wait longer for your operation. Some hospitals may not be able to provide operations under general anaesthetic if it is normally carried out using a local.

## Who administers the local anaesthetic and how is it given?

Both anaesthetists and eye surgeons are trained to administer local anaesthetic. There are two types of local anaesthetic:

- 1 Some operations are suitable to be carried out with numbing eye drops only.
- 2 Many operations require local anaesthetic injections as well as numbing eye drops. Injections are necessary for operations on the retina or other operations where the eye must be kept totally still. After using drops to numb the surface of the eye an injection is given around the eye (avoiding the eyeball itself).

## Is the local anaesthetic injection painful?

This varies from person to person. Eye drops that numb the surface of the eye are used first to make it as comfortable as possible. A very fine needle is used and there may be a feeling of stinging or pressure which usually lasts less than a minute.

## Are there any complications of local anaesthesia?

Local anaesthesia for eye surgery is regarded as the safest anaesthetic for many people. Sometimes you may develop bruising or a black eye as the injection damages a small blood vessel around the eye. This is not usually serious but can look unsightly for a week or so. It is more common if you take aspirin or other drugs that thin the blood.

Rarely, there is more important bleeding around the eye. This can mean your operation will have to be delayed to another day.

## Serious complications are very rare.

Although rare or very rare, damage to the eye, blood vessels or eye muscles and effects on your heart, blood pressure and breathing can happen. Your anaesthetist or eye surgeon will be able to give more information about these complications.



## Is there anything that makes people unsuitable for a local anaesthetic to the eye?

Yes. You will need to be able:

- to lie reasonably flat and still for between 45 minutes and an hour
- to follow simple instructions.

## Local anaesthetic is not normally recommended if you:

- cannot lie reasonably flat
- have an illness (e.g. Parkinson's) that makes being still difficult
- have a cough you cannot control
- have severe hearing difficulties
- will have difficulty understanding what is being said
- have severe claustrophobia
- have a known allergy to local anaesthetic drugs.



If any of these points applies to you it is important that you talk or write to your GP, surgeon or anaesthetist before the day of your operation. A general anaesthetic may be considered, depending on your general health. This would be discussed with you.

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# Before the operation

## Health Check: The Pre-Assessment Clinic

Once the operation date is planned, your health check is essential. You may be sent a short questionnaire about your health or be asked to attend a pre-operative assessment clinic. Nurses usually conduct the pre-assessment clinic with a doctor available for immediate advice. Your health is checked and a full medical history is taken. If you need any tests these will be arranged at this clinic. We will also ask you about your home situation to make sure you have enough support after the operation.

### You will be asked about:

- general health and fitness
- medical problems
- heart disease
- lung disease
- pain in the chest during exercise or at rest
- diabetes
- your current medication
- if you are pregnant
- allergies
- smoking
- alcohol intake
- help you have at home

## The day of the operation



You should receive clear instructions about if and when you should stop eating and drinking.



You can continue to take most prescribed medication as normal, including up to and on the day of your operation. If you are taking aspirin, clopidogrel or warfarin, please check with the hospital. You may need to stop it a few days before your operation. If you are diabetic, you will need instructions about your diabetic treatment.

If you have a cough or heavy cold on the day of surgery, you should telephone the ward for advice. Your operation may need to be postponed.

Please bring any medication you are taking with you to the hospital on the day of your operation so the doctors and nurses can check them. You usually continue taking your own medication while you are in hospital.

### In hospital

You will be seen by your eye surgeon (ophthalmologist) and anaesthetist. Your eye surgeon will check and mark the eye that is being operated on and discuss the operation and anaesthetic with you. You will be asked to sign a consent form and your forehead may be marked on the side of the eye to be operated on.

### What happens next?

- You may be asked to put on a hospital gown. Sometimes you can keep your own clothes on – you should wear comfortable clothing that is loose around the neck.

- Depending on the type of operation you are having the ward nurses may give you some eye drops to dilate your pupil (make your pupil bigger). These may make your sight slightly blurred.
- They may place local anaesthetic cream under your lower eyelid.
- It is sensible to use the toilet before you go to theatre so that you can lie still comfortably.
- The operating theatre staff will accompany you to theatre.



Theatre staff will ask you some questions to check who you are, and what operation you are having. They will check again with you which eye is being operated on and check your consent form.

## Can I have something to help calm me down?

Your anaesthetist and theatre staff are very used to helping people relax. Sedatives can sometimes make you very sleepy and slow your breathing which can lead to difficulty during the operation. Please discuss your wishes with your anaesthetist.



## What happens in the anaesthetic room?

You will be made comfortable on the operating trolley. Your anaesthetist will attach you to equipment to monitor:

- **your heart:** sticky patches will be placed on your chest (electrocardiogram or ECG)
- **your blood pressure:** a blood pressure cuff will be placed on your arm
- **the oxygen level in your blood:** a clip will be placed on your finger (pulse oximeter).

Your anaesthetist may need to give you drugs into a vein. A needle will be used to put a thin plastic tube (a cannula) into a vein in the back of your hand or arm. This is taped down to stop it slipping out.

The anaesthetist or eye surgeon will then give you the eye drops and/or injections which numb your eye.

After the local anaesthetic is given your eye will be kept closed to prevent anything touching and damaging the surface of the eye. Staff may massage your eye or place a small weight on the closed eye to help the anaesthetic spread evenly.

### **Will the local anaesthetic injection hurt?**

This varies from person to person. There may be stinging, pressure or pain which usually lasts less than a minute.

### **How do I know that the anaesthetic is working?**

Your anaesthetist or eye surgeon will check your eye to make sure it is numb. You may be asked to look in different directions to assess the effects of the anaesthetic. When they are happy that the anaesthetic has worked, you will be taken into the operating theatre.

# The operation

## What happens in the operating theatre?

- The nurse will check you are lying comfortably on the operating table and that your head is supported.
- A sterile surgical sheet will be placed over your face to keep the area around your eye clean. The sheet will have a hole in it so the surgeon can see your eye to be operated on.
- A tube may be placed under the surgical sheet which will blow fresh air around your mouth and nose. This is to help you breathe easily and feel comfortable during the operation.
- You may be aware of the area around your eye being cleaned with a cold fluid to keep it sterile.
- The heart and pulse monitors will be re-attached.
- You may feel a bit of water running down your face. This is quite normal as the surgeon uses a very weak salt-water solution to keep your eye moist.

A member of staff will sit with you and may offer to hold your hand throughout the operation.

## Can I speak during the operation?

No, it is best not to speak whilst the surgeon is operating on your eye as this will make your face move and could affect the surgery. If you want to say something, you will be asked to move your hand gently and the eye surgeon will stop operating so that you can speak.

## Will I see anything?

You will usually be able to see bright lights and you may see some movements during the operation. This varies from person to person. You will not be able to see any detail.

## What else will happen?

The surgeon operates with fine instruments that reach inside your eye – your eye is not removed from its normal position.

You will be aware that the surgeon is working and will feel some pressure. If you are uncomfortable in any way please let theatre staff know. More local anaesthetic can be given if necessary.

## What if I blink?

A small clip keeps your eyelids open so you do not need to worry about blinking.

## Can I wear my hearing aid during the operation?

It is usual practice to remove the hearing aid on the same side as the eye being operated on because, no matter how careful your surgeon is, water can enter the ear and the hearing aid may start to make noises.

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# After the operation

A nurse will escort you back to the ward in a wheelchair.

Your eye may be covered with a shield or pad until the following day to protect it and stop you from rubbing it whilst asleep. You may experience double vision for a time, due to the after effects of the anaesthetic.

## What about going home?

When you have recovered and your transport arrives, you may go home. Before you go, the ward nurse will give you written instructions about recovering from your operation, for example what activities to avoid. He or she will also tell you about any medication you need to take and will show you how to put your eye drops in if you are unsure. Drops may be used following surgery to stop inflammation (swelling) and help prevent infection. You will be asked to attend the ward or the outpatient clinic for a further check up.

## How long does the anaesthetic last?

Your eye will stay numb for two to three hours, although it can last up to four hours. Double vision may persist for several hours.

## Will I be in pain?

You may feel some discomfort when the anaesthetic wears off and a mild painkiller such as paracetamol may be required. The hospital will advise you on this before you are discharged. For this reason it is good if you can have someone to help you at home and stay with you for the first night following surgery. If you experience severe pain contact your GP or the hospital immediately.



## When can I drive?



You will need to ask the surgeon how long you should wait before driving, as it varies from person to person.

## Do I need to take any special care?



You will receive individual instructions about the care of your eye, but you should think about the following:

- Avoid rubbing your eye.
- If you are a restless sleeper wear an eye shield so you can't rub your eye without knowing when asleep.
- Contact the hospital if you notice a worsening of your symptoms, for example if your vision gets worse, if you develop new symptoms or if the eye becomes painful.
- Avoid very heavy lifting, strenuous exercise and swimming until you get the all-clear from the hospital.
- Take care in windy weather in case you get something in your eye. Sunglasses can give some extra protection from dust and grit.



## Where can I get further information?

If you want to ask any further questions about the type of anaesthetic planned for your operation please contact your local hospital or clinic before you come into hospital.

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# Useful organisations

## The Royal College of Anaesthetists

Churchill House  
35 Red Lion Square  
London WC1R 4SG  
Tel: 020 7092 1500

website: [www.rcoa.ac.uk](http://www.rcoa.ac.uk)  
E-mail: [info@rcoa.ac.uk](mailto:info@rcoa.ac.uk)  
Fax: 020 7092 1730

This organisation is responsible for standards in anaesthesia, critical care and pain management throughout the UK.

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## The Association of Anaesthetists of Great Britain and Ireland

21 Portland Place  
London WC1B 1PY  
Tel: 020 7631 1650

website: [www.aagbi.org](http://www.aagbi.org)  
E-mail: [info@aagbi.org](mailto:info@aagbi.org)  
Fax: 020 7631 4352

This organisation works to promote the development of anaesthesia and the welfare of anaesthetists and their patients in Great Britain and Ireland.

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## The Royal College of Ophthalmologists

17 Cornwall Terrace  
London NW1 4QW  
Tel: 020 7935 0702

website: [www.rcophth.ac.uk](http://www.rcophth.ac.uk)  
Fax: 020 7935 9838

This organisation is responsible for the standards, education and research for ophthalmology, throughout the UK. It has a series of information leaflets about different types of eye surgery at <http://www.rcophth.ac.uk/genpublic.html>

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## The Royal National Institute for the Blind (RNIB)

105 Judd Street  
London WC1H 9NE  
Tel: 020 7388 1266

website: [www.rnib.org.uk](http://www.rnib.org.uk)  
E-mail: [helpline@rnib.org.uk](mailto:helpline@rnib.org.uk)  
Fax: 020 7388 2034

RNIB's work helps anyone with a sight problem – not just with braille, Talking Books and computer training, but with imaginative and practical solutions to everyday challenges. If you or someone you know has a sight problem, RNIB can help. Call the RNIB Helpline on 0845 766 9999 (Monday to Friday 9–5 pm. Calls charged at local rates to UK callers) or visit their website. The RNIB can provide a confidential interpreter in your language within minutes of your call. Simply state in English the language you prefer to use.

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## Questions you may like to ask your anaesthetist:

**Q Who will give my anaesthetic?**

**Q Have you often used this type of anaesthetic?**

**Q What are the risks of this type of anaesthetic?**

**Q Do I have any special risks?**

**Q How will I feel afterwards?**

## Tell us what you think

We welcome suggestions to improve this booklet.

You should send these to:

The Patient Information Unit  
Churchill House  
35 Red Lion Square  
London WC1R 4SG  
email: [standards@rcoa.ac.uk](mailto:standards@rcoa.ac.uk)

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



The Royal College of Anaesthetists



The Association of Anaesthetists of Great Britain and Ireland