



The Royal College of
Anaesthetists



The Association of
Anaesthetists of
Great Britain and
Ireland

BOAS 
British Ophthalmic Anaesthesia Society

Local anaesthesia for your eye operation

Information for patients

www.rcoa.ac.uk/patientinfo

Fourth edition 2014

This leaflet explains what to expect when you have an eye operation with a local anaesthetic. It has been written by patients, patient representatives and anaesthetists, working together.

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

The website includes the following:

- Anaesthesia explained (a more detailed booklet)
- You and your anaesthetic (a shorter summary)
- Your spinal anaesthetic
- Anaesthetic choices for hip or knee replacement
- Epidural pain relief after surgery
- Your child's general anaesthetic
- Your anaesthetic for major surgery
- Your anaesthetic for a broken hip
- Brachial plexus block for surgery and pain relief

Risks associated with your anaesthetic

This is a collection of 14 articles about specific risks associated with having an anaesthetic or an anaesthetic procedure. It supplements the patient information leaflets listed above and is available on the website: www.rcoa.ac.uk/patients-and-relatives/risks.



Throughout this leaflet and others in the series, we have used this symbol to highlight key facts.

Local anaesthetic for an eye operation

A local anaesthetic is a drug that stops you feeling pain. For eye surgery, it can be given as eye drops and/or injections. After you have the local anaesthetic you will still be awake and aware of what is happening to you. The aim is that you feel no pain during the operation.

What are the advantages of local anaesthesia?

A local anaesthetic usually works very well at preventing you feeling pain during an operation on the eye. It also gives you pain relief after the operation, for several hours. It has fewer risks and side effects than a general anaesthetic, especially if you are elderly. This is because it doesn't affect other parts 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 most of your normal medicines. You can eat and drink more freely with a local anaesthetic than with a general anaesthetic – staff at the hospital will advise you about this.



I would 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 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, as waiting lists for surgery under general anaesthetic tend to be longer. Some hospitals may not be able to provide operations under general anaesthetic.

How is the local anaesthetic given?

There are two types of local anaesthetic:

- 1 Some operations can be carried out with eye drops that numb the eye. No injections are required. Your surgeon will be able to tell you if this is possible for your type of operation.
- 2 Many operations require local anaesthetic injections. This includes operations where the eye must be kept very still – for example operations on the retina. Drops are given first, to numb the surface of the eye. Then an injection is given near to the eye (but not into 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.

Is there anything that means a person cannot have a local anaesthetic for an eye operation?

Yes. You will need to be able:

- to lie reasonably flat and still for 45–60 minutes
- to follow simple instructions.



Local anaesthetic is not normally recommended if you:

- cannot lie reasonably flat
- find it difficult or impossible to keep still (e.g. Parkinson's disease)
- 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 will be discussed with you and a general anaesthetic will be considered.

Who administers the local anaesthetic?

Both anaesthetists and eye surgeons are trained to administer local anaesthetic.

Are there any complications of local anaesthesia?

Local anaesthesia for eye surgery is 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, bleeding after the injection can cause problems around the eye.

 Your surgeon may decide that the operation will have to be delayed to another day.

Serious complications

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

Before the day of the operation

Health check: the pre-assessment clinic

Once the operation date is planned, a health check is needed. You may be sent a short questionnaire about your health or you may be asked to attend a pre-assessment clinic. Nurses usually conduct the pre-assessment clinic, with a doctor available for advice.

You will be asked about your general health.

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.



Your usual medicines

The staff in the pre-assessment clinic will record the medicines you take. Please bring a list or the medicines themselves in their boxes. This should include any over-the-counter or herbal medicines that you take.

Most medicines can be taken as usual before the operation. However, some medicines or tablets must be stopped a few days before. You will be given instructions about what to take and what must be stopped. These instructions are important and must be followed carefully.

For example, if you take aspirin, clopidogrel or warfarin, you will need specific instructions.

The day of the operation

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

 You should follow the instructions you have been given about taking your usual medicines on the day of your operation. You can have a sip of water to take any tablets, as needed.

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 all your medicines, tablets and inhalers with you so the doctors and nurses can check them.

Meeting your surgeon

You will be seen by your eye surgeon (ophthalmologist). He/she will check which eye is being operated on and discuss the operation with you. You will be asked to sign a consent form and your forehead may be marked on the side near to the eye to be operated on.

Meeting your anaesthetist

If an anaesthetist is working with the eye surgeon, you will meet him/her and they can answer any questions that you have about the anaesthetic.

Can I have something to help me relax?

 Your anaesthetist and other staff in the theatre are very used to giving reassurance, which helps people relax. Sedative drugs can sometimes cause problems during the operation if you become very sleepy and your breathing slows down. Please discuss your concerns with your anaesthetist or surgeon.

What happens next?

- You may be asked to put on a hospital gown. Some hospitals allow people to wear their own clothes. You should wear comfortable clothing that is loose around the neck.
- For some operations, a nurse on the ward will give you some eye drops to dilate your pupil (make it bigger). Your sight will become slightly blurred.
- It is sensible to use the toilet before you go to theatre so that you can lie still comfortably.
- A nurse will accompany you to theatre by trolley, wheelchair or, if you prefer, you can walk.



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.

In the anaesthetic room

You will be made comfortable on the operating trolley. Your anaesthetist will place 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).

A needle will be used to put a cannula (thin plastic tube) into a vein in the back of your hand or arm. This is secured with sticky tape. This is for the anaesthetist to give you any drugs that you may need.

You are then ready for the anaesthetist or eye surgeon to give you the eye drops and/or injections that numb your eye.

Having the anaesthetic

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.

What happens 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, apply pressure or place a small weight on the closed eye to help the anaesthetic spread evenly.

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.

What happens in the operating theatre?

- The heart and pulse monitors will be reattached.
- The nurse will check you are lying comfortably. A pillow is often placed under your knees to take the strain off your back and hips.
- A member of staff will sit with you and may offer to hold your hand throughout the operation.
- 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 work on your eye.
- A tube may be placed under the surgical sheet, which will blow fresh air around your mouth and nose. This is to help you feel comfortable during the operation.
- The area round your eye will be cleaned with a cold fluid. During the operation, water is used to keep your eye moist. You may feel it running down your face. This is quite normal.

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.

What will I hear?

You will hear the surgeon speaking to the theatre team during the course of the operation. Equipment in the theatre can make gentle continuous sounds. The heart monitor may ‘bleep’.

Will I see anything?

You will usually be able to see bright lights and you may see some movement 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 may feel touch and pressure. You should not experience any pain. If you are uncomfortable in any way, you must let theatre staff know, so that 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, even with care, water can enter the ear and the hearing aid may malfunction and start to make noises.

After the operation

A nurse will escort you back to the ward in a wheelchair. Your eye may stay numb for two to three hours, although it can be longer.

Your eye may be covered with a pad until the following day, to protect it and stop you from rubbing it whilst asleep. When the eye pad is removed, you may experience double vision for several hours.

When can I go home?

When you are feeling well and have had something to eat and drink, you may go home.

The ward nurse will tell you about any medication you need to take. Eye drops may be used following surgery, to reduce inflammation (swelling) and help prevent infection. If you need to come back to the clinic for a check, you will be told about this.

Will I be in pain?

You may feel some pain from the operation when the anaesthetic wears off. A painkiller such as paracetamol may be required.

 If you experience severe pain please contact the eye clinic or your GP immediately.

Do I need to take any special care?

- Avoid rubbing your eye.
- Take care in windy weather in case you get something in your eye.
- Avoid very heavy lifting, strenuous exercise and swimming for a period of time, as advised by the team looking after you.
- If your vision gets worse, or if the eye becomes very painful, you should contact the hospital immediately for advice.

Questions you may like to ask your anaesthetist

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

Tell us what you think

We welcome suggestions to improve this leaflet. You should send these to:

The Royal College of Anaesthetists
Churchill House
35 Red Lion Square
London WC1R 4SG

comms@rcoa.ac.uk

Fourth Edition 2014

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

© **The Royal College of Anaesthetists (RCoA), Association of Anaesthetists of Great Britain and Ireland (AAGBI) and the British Ophthalmic Anaesthesia Society (BOAS)**

The RCoA, AAGBI and BOAS agree to the copying of this leaflet for the purpose of producing local leaflets. Please quote where you have taken the information from. Any changes must be agreed if the AAGBI, RCoA and BOAS crests are to be kept.