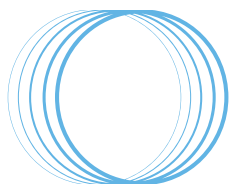




Cataract surgery



HEREFORD
VISION

This leaflet will help you to decide whether to undergo a procedure to remove a cloudy lens – or cataract – from inside your eye. Please read this brochure in full and consider discussing the contents with a friend or relative, if appropriate. Please make a note of any questions that you may have and discuss them with your surgeon prior to your procedure.

A cataract is a cloudy lens inside your eye, which can make it difficult for you to see well enough to carry out your usual daily activities. If the cataract is not removed, your vision may stay the same, although it will usually worsen with time. Waiting for a longer period of time until you decide to have surgery does not normally make the operation more difficult.

Cataract surgery

The purpose of the operation is to replace the cloudy lens (cataract) with an artificial lens implant inside your eye. One major advantage of private cataract surgery over NHS surgery is the ability to choose the type of lens implant that will be placed in your eye: a special multifocal lens typically allows both distance and reading vision without the need for spectacles; toric lenses can treat astigmatism, making vision without spectacles even clearer. Your surgeon would normally issue you with a separate leaflet on premium lenses, should these likely be relevant to you, as it is not always possible to use such lenses in every patient.

After your eyes have been measured for the procedure, you can relax and schedule your procedure for a time convenient to you; you can also resume contact lens wear (if appropriate) until the day prior to your procedure. On the day of your procedure, you will be greeted in reception and a nurse will then start applying eye drops to enlarge the pupil of the eye. Shortly before the procedure

itself, anaesthetic eye drops and a disinfectant eye drop will be given.

The cataract procedure is usually carried out under using local anaesthetic eye drops alone, although in most cases a mild sedative tablet is recommended to allay any anxieties you may have. With local anaesthetic you will of course be awake during the operation; you will not be able to see what is happening, but you will be aware of a bright light. If you would prefer more formal sedation or even a general anaesthetic, please discuss this in advance; it will not be possible to arrange this on the day. Calming music is usually played during the procedure, which helps you to stay relaxed.

During the operation you will be asked to keep your head still, and lie as flat as possible, but we will endeavour to ensure that you are comfortable before the procedure starts. The operation is normally quite painless and takes only 10-15 minutes, but in rare cases may take up to 45 minutes. A nurse will hold your hand the whole time to make sure that you are feeling alright, but also to allow you to communicate with the surgeon, as talking unexpectedly is discouraged. Only the eye to be treated is left exposed, the rest of the face being covered up by a light drape to keep the procedural area clean.

Most cataracts are removed by a technique called phacoemulsification: a tiny painless cut (only 2.2mm) is made in the eye, the lens is softened with sound waves and then removed through a small tube. The back layer of the lens (the lens capsule or 'bag'), which is less than a hundredth of a millimetre thick, is left behind. An artificial lens (implant, IOL) is then inserted into the bag to replace the cataract. In rare cases, a small stitch may need to be put in the eye.

After the operation

If you have discomfort, a pain reliever such as Paracetamol is recommended (but not aspirin - this can cause bleeding). It is normal to have slightly itching, sticky eyelids and mild discomfort for a while after cataract surgery, although many patients are unaware of any unusual sensations at all. Some fluid discharge is common. After 1-2 days even mild discomfort should disappear. Although you are not encouraged to look, you may notice that the white of the eye is red up underneath the eyelid; this is normal. In most cases, healing will take about two to six weeks, after which new glasses can be prescribed, if needed at all.

You will be given eye drops to reduce the normal inflammation following surgery. The hospital staff will explain how and when to use them. Please do not rub your eye, and avoid getting water into the eye in the weeks after surgery (e.g. avoid swimming). Certain symptoms could mean that you need prompt treatment. Please contact your surgeon immediately if you have any of the following symptoms:

- ▶ Excessive pain
- ▶ Worsening vision
- ▶ Increasing redness of the eye

Likelihood of better vision

After the operation you may read or watch TV almost straight away, but your vision may be blurred. The healing eye needs time to adjust so that it can focus properly with the other eye, especially if the other eye has a cataract or a differing spectacle prescription. In most cases, the vision improves dramatically when the eye drops used to dilate the pupil wear off (around 24 hours).

The vast majority of patients have improved eyesight following cataract surgery, with the

average (median) spectacle-free distance vision being "20:20" for all-comers in a recent audit of HerefordVision practice. 98.4% of patients described themselves as at least happy with the outcome of the procedure.

Please note that if you have another condition such as diabetes, glaucoma or age-related macular degeneration your quality of vision may still be limited even after successful surgery, although this is typically explained to you in advance.

Benefits and risks of cataract surgery

The most obvious benefits are greater clarity of vision and improved colour vision, but because lens implants are selected to compensate for existing focusing problems, most people find that their eyesight improves considerably after surgery. Some patients, however, need to wear glasses for distance vision or close work following the operation; your chances of this are particular to you and your lens choices, and will be discussed with you by your surgeon.

You should be aware that there is a small risk of complications, either during or after the operation.

Some possible complications during the operation:

- Tearing of the back part of the lens capsule with disturbance of the gel inside the eye, which may sometimes result in reduced vision, and / or delayed recovery from the procedure. This occurs in less than 1:300 procedures.
- Loss of all or part of the lens into the back of the eye requiring a further operation, which may require a general anaesthetic. This is uncommon (around 1:1,000 cases).

- Bleeding inside the eye (very rare with modern techniques, but conceivably could lead to loss of vision or even the eye itself).
- In the highly unusual event of a significant complication, it may not be safe to place a lens implant – temporarily or very rarely permanently. In this case a subsequent procedure may be necessary to implant an IOL at a later stage (contact lens wear would be an alternative).

Some possible complications after the operation:

- Allergy to, or intolerance of, the eye-drops used. A change in eye drops helps.
- Some eye surface discomfort is common in the early months after most forms of eye surgery. This is typically mild after cataract surgery and may be asymmetrical. Lubricant eye drops can help with these symptoms and are usually safe to take in addition to the normal eye drops given after surgery, but please check with your surgeon.
- Some variability of vision is normal in the early weeks after surgery and patience can sometimes be required.
- Bruising of the eye or eyelids. This is uncommon, but can manifest as red blotches on the white of the eye (particularly under the upper eyelid). These are nothing to worry about and will settle spontaneously; their presence does not reflect the underlying health of the eye.
- Floaters. The development of floaters in middle age is exceptionally common, a change occurring as a result of maturity of the jelly of the eye. Cataract surgery can hasten the development of such changes, however, in many cases the extra light that a new lens allows into the eye simply makes you more aware of pre-existing floaters.
- High pressure inside the eye. This is more common in patients predisposed to glaucoma.
- Clouding of the cornea, which could conceivably lead to a requirement for a corneal graft and imperfect vision.
- Incomplete removal of the lens. In cataract surgery, the native human lens is broken up into tiny pieces, which are then removed by suction. On rare occasions, tiny fragments of lens can become sequestered either behind the pupil during surgery, or in the angle between the cornea and the iris. In such an event, a further very quick procedure, washing out the front of the eye may be necessary. Recovery should then otherwise be uneventful.
- Incorrect strength or dislocation of the implant. In patients with multifocal lenses, centration of the lens is crucial; in the unlikely event of the lens being decentred at your postoperative visit, and your vision is suboptimal, then a small corrective procedure may be advised, although rarely it may prove impossible to achieve long term perfect centration / orientation.
- Swelling of the retina (macular oedema), approximately 1:100 eyes. Drops are given following surgery to reduce the risk of this happening.
- Detached retina, which can lead to loss of sight. It is important to state

that cataract surgery does not change the underlying 'medical' state of the eye; initially short-sighted patients continue to have a higher underlying risk of retinal detachment than non-short-sighted patients. In addition, however, the risk of retinal detachment is approximately five times higher in the first four years after surgery.

- Infection in the eye (endophthalmitis), which can lead to loss of sight or even the eye, despite prompt treatment. We go to great lengths to reduce the risk of postoperative infection to as low a level as we believe is possible, including the use of antibiotics, special eye cleansing techniques, mask wearing during the procedure and no-touch techniques. In the exceptionally unusual event of infection (less than 1: 1,000), the scientific literature suggests that the organism in question is nearly always borne by the patient, rather than being 'cross-infected' from the hospital / staff.
- Glare and associated symptoms. All types of intraocular lens can be associated with glare and associated symptoms, although the incidence of these is higher in patients having multifocal / toric multifocal lenses implanted. Even with standard monofocal lenses, some patients are aware of a shadow in their peripheral vision, although generally such side effects diminish with time as the new lens settles in. Optical side effects may initially interfere with driving, work and leisure activities, but it is uncommon for such side effects to persist in the medium and longer term. For patients with troublesome

optical side effects from multifocal lens, less than 1% choose to undergo a lens exchange procedure, swapping a multifocal for a monofocal lens, although such surgery is potentially difficult.

- Most intraocular lenses are not visible, but people may occasionally notice a glint in your eye caused by a reflection from the front of the lens.

Complications are rare and in most cases can be treated effectively. In a small proportion of cases, further surgery may be needed; the risk of this happening is approximately 1 in 300. Very rarely, some complications can result in loss of sight. Overall the risk of severe loss of vision (blindness) in the affected eye is less than 1 in 1,000.

The most common complication is called '*posterior capsule opacification*', affecting around *1:10 to 1:15 patients*. It may come on gradually after months or years. When this happens, the back part of the lens capsule, which was left in place inside the eye to support the implant, becomes cloudy. This prevents light from reaching the retina. To treat this, a laser beam is used to make a small opening in the cloudy membrane in order to restore the eyesight. This is a painless outpatient procedure, which normally takes only a few minutes and does not need to be repeated, normally restoring your vision to its previous postoperative state. This treatment is available on the NHS if desired and is not included as part of your surgical package.

We hope that this information is sufficient to help you decide whether to go ahead with surgery

Please find below information that is given to patients after their cataract procedure

You have just had a procedure to remove a lens from your eye, replacing it with a new lens. At this stage, it is likely that your vision in the eye is still blurry, although many comment how bright the world seems. It is likely that your vision will stay blurry until at least tomorrow, due to the fact that your eye has just had surgery and also because your pupil will still be dilated. Some mild discomfort is normal, which should respond well to paracetamol alone.

A shield is normally placed over the eye to protect it, as well as to give you confidence during the first night after surgery that you will not inadvertently damage your eye in your sleep. Many surgeons do not use a shield and if it upsets you, please take it off. In any case, you should peel the shield off to put your eye drops this evening, before reapplying it for sleeping.

- Please make sure you use the drops supplied, 4x/day for a total of 4 weeks, unless otherwise advised by your surgeon. It is often easier for someone else to put the drops in; please ensure that hands are washed before use and try not to touch the end of the bottle on the eye or surrounding skin.
- Do not rub your eye.
- Other eye drops. If you use e.g. glaucoma drops, then it is usually safe to continue, although it is important to use a new bottle for the freshly operated eye. If you are taking a prostaglandin drop, e.g. latanoprost (Xalatan), bimatoprost (Lumigan) or travoprost (Travatan), then we generally ask you to stop for 4 weeks after surgery.

- Showering / washing. To reduce the risk of infection, it is best not to get any water into the eye; keep the eye closed in the shower and avoid splashing water in for at least a week. If you wish, you could attend the hairdressers' towards the end of the first week, but ensure you keep your eyes closed if your hair is being washed.
- We do not advise swimming for at least 4 weeks after surgery.
- Exercise. You have just had an operation, so please keep exercise light for a week or so. Gentle gardening is fine, provided that at no point you bring a dirty hand near to your face / eye, as is walking the dog etc. No swimming as above.
- Do not be concerned if the eye is red in the first few days – this will settle down – however, if redness increases please contact me.
- Lens surgery changes your spectacle prescription: to allow reading in the short term, a pair of off-the-shelf '+2.5' reading glasses may be worth a small investment, unless you have had a multifocal lens implanted.
- Either your surgeon or a member of the HerefordVision team will ring you tomorrow to check on you after your surgery. Please feel free to ask any questions at the stage.

Your vision should continue to improve from tomorrow. Should it deteriorate, it is important that you seek help without delay. Likewise, if the eye becomes painful during the first week, it is also important that you contact your surgeon.

Anaesthetic options for cataract & lens replacement surgery

Modern cataract & lens surgery is typically performed with the use of eye drop anaesthetic alone. Immediately prior to the procedure, eye drops are administered which completely numb the front of the eye, but do not paralyse eye movements or affect the vision of the eye. This leads to quicker recovery from the procedure and also avoids the risks of the anaesthetic injections of yesteryear.

The use of eye drop anaesthetic makes it highly unlikely that you will feel any sharpness or pain during the procedure, although you will probably feel "pressure"-type sensations at various key stages during the procedure. Your surgeon will warn you in advance of such sensations occurring, which is usually more than sufficient to allow you to remain relaxed. In the unusual event of the sensations become uncomfortable, it is always possible to administer an additional, safe and needle-free local anaesthetic during the procedure.

Option (1)

Although I do not think you will feel pain, I would recommend the use of a mild sedative tablet (typically diazepam, supplied by the hospital on the day) in your case, which helps relax you prior to, during and after the procedure. While many are happy to admit their anxieties, others can exhibit slightly unusual behaviour during the procedure, which can interfere with surgery. Examples include breath holding, deep breathing and unpredictable movements, most of which can be controlled by a sedative. The use of a sedative pill is also highly recommended for second eye surgery, as it is not unusual for you otherwise to be more aware of your surroundings. You should naturally expect to feel a little drowsy afterwards.

Option (2)

In your case, I would recommend a deeper form of sedation to allow the procedure to be carried out safely. Typically, this involves an anaesthetist placing a small plastic tube into the back of your hand to administer a low dose of an intravenous sedative / anaesthetic, which means that you are unlikely to remember any of the procedure. It is important that you do not eat for 6 hours prior to the procedure, but you will not be required to change out of your normal clothes. Extra fees apply.

Option (3)

In your case, I would recommend carrying out the procedure with the assistance of a general anaesthetic (going to sleep for the operation). You may need to have a formal assessment of your fitness by the hospital / anaesthetist and should expect to spend 3-4 hours after the procedure in the hospital. It is important that you do not eat for 6 hours prior to the procedure, and you will be required to change out of your normal clothes into a hospital gown. Extra fees apply.

If you would prefer to change your anaesthetic option, it is important to contact HerefordVision well in advance of surgery, as it will not be possible to organise on the day.

Please find below a sample additional consent form, which you will be asked to sign on the day of surgery. Please do not hesitate to contact your surgeon in advance if you have any questions regarding the proposed surgery.

Sample consent form

I,, date of birth, give my consent for a LEFT / RIGHT phacoemulsification procedure with placement of an intraocular lens.

I have read the leaflets issued to me by my surgeon and understand the contents.

After reading this information, I understand that any procedure has a risk involved and that the overall risk of serious loss of sight as a result of the proposed surgery is approximately 1: 1,000. I understand that, while uncommon, other complications can occur, which may delay recovery or potentially lead to a level of vision with which I am disappointed.

I also understand that, although I have had my eyes measured for surgery by a modern laser technique, there is no absolute guarantee that the refractive outcome (desired spectacle prescription, if any) will be perfect due to the nature of the formulae used to estimate the required intraocular lens power. Approximately 90% of patients achieve a refractive outcome within 1 Dioptre of their goal and approximately 70% within 0.5 Dioptres. I therefore understand that there is a small but significant chance of remaining spectacle-dependent, for both distance and near, despite surgery. This applies even if a premium multifocal or toric lens has been used. Subsequent corrective refractive surgery may be possible at a later date for some patients.

Delete if not applicable:

For patients who have chosen multifocal and/or toric lenses, in the unlikely event of a complication, which makes placement of such a lens impossible or unsafe, I understand that a standard intraocular lens may need to be used instead.

Additional comments specific to me:

Signed: Date:



HEREFORD VISION

Telephone: 01432 370874

Email: vision@privatemedsec.com

www.HerefordVision.com

HerefordVision

Nuffield Health Hereford

Venns Lane

HR1 1DF